

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

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

MEMORANDUM OPINION AND ORDER

Adopted: May 22, 2001

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By the Commission:

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## I. INTRODUCTION AND EXECUTIVE SUMMARY

1. In the Multiple Address Systems (MAS) *Report and Order*, WT Docket No. 97-81, we streamlined the licensing procedures, created a flexible regulatory framework, and restructured our Rules affecting the MAS service.<sup>1</sup> This *Memorandum Opinion and Order* addresses four petitions for reconsideration and/or clarification of the *MAS R&O*. Generally, the petitioners applaud the Commission's efforts in this service and request reconsideration and/or clarification on issues relating to the types of services classified as private internal, grandfathering provisions as they relate to transfers and assignments, shared use and private carrier service in the private internal bands, operational flexibility, service area coverage of the Gulf of Mexico and other minor points that will help clarify our intentions for this service. In addition, we adopt minor changes on our own motion to certain technical requirements in Part 101, as well as, the current application freeze in certain MAS bands. In this *Memorandum Opinion and Order*, we grant two of the petitions and grant the third petition, in part. The fourth petition is dismissed as moot.

## II. BACKGROUND

2. MAS is a radio communications service located in the 900 MHz band and licensed under Part 101 of our Rules. The service consists of a total of 3.2 MHz of spectrum and has primarily been used by the power, petroleum, and security industries for various alarm, control, interrogation, and status reporting requirements, and by the paging industry for control of multiple paging transmitters in the same general geographic area.<sup>2</sup>

3. On February 27, 1997, the Commission initiated a comprehensive examination of the MAS service exploring ways to streamline licensing procedures while increasing flexibility.<sup>3</sup> Among other things, the Commission proposed to designate most of the spectrum in the 932/941 MHz bands and all of the spectrum in the 928/959 MHz bands for subscriber-based services, and to use competitive bidding to select among mutually exclusive applications for licenses in these bands.<sup>4</sup> The Commission also proposed to designate the 928/952/956 MHz bands exclusively for private internal use, and to forgo using competitive bidding to select among mutually exclusive applications in these bands.<sup>5</sup> Additionally, the Commission temporarily suspended the acceptance and processing of MAS applications for new licenses, amendments, or modifications for the 932/941 MHz bands, the 928/959 MHz bands, and applications to

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<sup>1</sup> Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Report and Order*, 15 FCC Rcd 11956 (2000) (*MAS R&O*).

<sup>2</sup> See Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Further Notice of Proposed Rule Making and Order*, 14 FCC Rcd 10744, 10746 (1999) (*Further Notice*); Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Notice of Proposed Rule Making and Order*, 12 FCC Rcd 7973, 7976 (1997) (*Notice*). A total of 3.2 MHz of spectrum is currently designated for MAS. This spectrum is divided into three general categories: (1) the 928/952/956 MHz bands (928/952 - 1.7 MHz paired, 956 - 200 kHz unpaired); (2) the 928/959 MHz bands (300 kHz paired); and (3) the 932/941 MHz bands (1 MHz paired).

<sup>3</sup> See *Notice*, 12 FCC Rcd 7973.

<sup>4</sup> *Id.* at 7997.

<sup>5</sup> *Id.* at 7980.

provide subscriber-based service in the 928/952/956 MHz bands pending the resolution of the issues in the proceeding.<sup>6</sup>

4. Subsequently, on March 6, 1998, the Wireless Telecommunications Bureau concluded that certain users of MAS spectrum, specifically, GTECH Corporation (GTECH), CN WAN Corporation,<sup>7</sup> Radscan of Detroit, Inc. (Radscan), Telebeepeer of New Mexico, Inc. (Telebeepeer), and Unicom Corporation (Unicom), do not provide subscriber-based services. Consequently, these entities could apply for the spectrum in the 928/952/956 MHz (private internal) MAS bands.<sup>8</sup>

5. On July 1, 1999, we released a *Further Notice*, seeking comment on the impact of the provisions of the Balanced Budget Act of 1997 on spectrum allocation and the licensing proposals initially introduced in the *Notice*.<sup>9</sup> In addition, we expanded the application freeze by immediately suspending the acceptance and processing of applications in all of the MAS bands, regardless of the type of service proposed by the applicant.<sup>10</sup> On January 19, 2000, we addressed the issues set forth in the *Notice* and *Further Notice*.<sup>11</sup> In the *MAS R&O*, we (1) designated the 928/952/956 MHz bands and twenty channels in the 932/941 MHz bands for public safety/Federal Government and private internal uses, to be licensed on a site-by-site basis; (2) established economic areas (EA) as the geographic area licensing boundaries for the 928/959 MHz bands and

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<sup>6</sup> *Id.* at 8003-04.

<sup>7</sup> CN Wan Corporation, a wholly-owned subsidiary of Schlumberger Resource Management Services, Inc., recently assigned several licenses to Schlumberger. Therefore, we will use Schlumberger in all future references to this entity in this *Memorandum Opinion and Order*.

<sup>8</sup> GTECH Corporation, CN WAN Corporation, Radscan of Detroit, Inc., Telebeepeer of New Mexico, Inc. and Unicom Corporation Petitions for Reconsideration of Dismissal of Applications for Multiple Address System Authorization, *Memorandum Opinion and Order*, 13 FCC Rcd 4290 (WTB 1998) (*1998 WTB Order*).

<sup>9</sup> *Further Notice*, 14 FCC Rcd 10744. On August 5, 1997, the Balanced Budget Act, *inter alia*, amended Section 309(j) of the Communications Act, as amended (the Communications Act) to require the Commission, with limited exceptions, to award mutually exclusive licenses using competitive bidding procedures. The Conference Report for the Balanced Budget Act states that private internal radio services used by utilities, railroads, pipelines, etc. are within the scope of the exemption. In addition to amending Section 309(j), Congress eliminated the Commission's authority to issue licenses by lottery after July 1, 1997, with certain exceptions. The Commission recently released a *Report and Order* in a separate proceeding which provides guidelines on determining the auctionability of wireless services in light of the Balanced Budget Act. *See* Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87, *Report and Order*, 15 FCC Rcd 22709 (2000) (*BBA R&O*). *See also* H.R. Conf. Rep. No. 105-217, 105<sup>th</sup> Cong., 1<sup>st</sup> Sess., at 572 (1997).

<sup>10</sup> *Further Notice*, 14 FCC Rcd at 10761.

<sup>11</sup> *MAS R&O*, 15 FCC Rcd 11956. We note that we released an Erratum to the *MAS R&O* on March 3, 2000 and that the *MAS R&O* appeared in the Federal Register on April 3, 2000. *See also* Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Erratum*, 15 FCC Rcd 16415 (2000).

twenty channels in the 932/941 MHz bands; (3) grandfathered existing MAS operations while limiting expansion in the 928/959 MHz bands; (4) introduced flexibility to the MAS service by allowing mobile and fixed operations on a co-primary basis for, both, point-to-point and point-to-multipoint operations; and (5) modified the application freeze for the MAS bands.<sup>12</sup>

### III. DISCUSSION

6. We have before us four petitions for reconsideration and/or clarification (Petitions) filed by Schlumberger, Radscan, Critical Infrastructure Communications Coalition (CICC), a coalition of associations representing the interests of railroads, pipelines and utilities, and the United States Environmental Protection Agency (EPA).<sup>13</sup> The Petitioners request reconsideration and/or clarification of the following decisions adopted in the *MAS R&O*: (1) designating the 928/952/956 MHz bands and twenty of the forty channel pairs in the 932/941 MHz bands for public safety/Federal Government and private internal services, and providing that these channels will be licensed on a first-come, first-served, site-by-site basis; (2) defining “private internal services” as “a service where licensees use their authorized frequencies purely for internal business purposes or public safety communications and not on a for-hire or for-profit basis;” (3) grandfathering existing MAS operations on the currently occupied bands and limiting system expansion in the 928/959 MHz bands; (4) establishing service areas based on EAs for geographic area licenses; and (5) introducing flexibility to the MAS technical rules by allowing MAS licensees to provide mobile and fixed operations on a co-primary basis for point-to-point and point-to-multipoint operations. The EPA filed a petition on behalf of the drinking water and wastewater treatment industries that use MAS spectrum for their Supervisory Control and Data Acquisition (SCADA) systems. Because the issues associated with the relief that is sought were addressed in the *MAS R&O*, we dismiss the EPA petition as moot.<sup>14</sup> Additionally, throughout this *Memorandum Opinion and Order*, we initiate discussion of certain operational and grandfathering issues on our own motion in an effort to clarify our position with respect to certain policies and rules.

#### A. Private Internal Service

7. Background. In the *MAS R&O*, we allotted spectrum for current and future MAS

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<sup>12</sup> See *MAS R&O*, 15 FCC Rcd 11956.

<sup>13</sup> The comment period in response to these Petitions ended on July 17, 2000, without the Commission receiving any comments.

<sup>14</sup> In its petition, the EPA requests that the Commission ensure that its approach in the MAS proceeding is consistent with the scope of the “public safety radio services” exemption outlined in the BBA Conference Report and asks us to lift the freeze in the 928/952/956 MHz bands while reserving a portion of the 932/941 MHz bands for utilities. We have complied with their request in the *MAS R&O* by lifting the MAS freeze in the 928/952/956 MHz bands and the portion of the 932/941 MHz bands designated for private internal use. See *MAS R&O*, 15 FCC Rcd 11956, 11965-66 ¶¶ 20-23, 11968-71 ¶¶ 29-38, 12011 ¶¶ 136-137. Our approach in MAS is consistent with that taken in our proceeding implementing the BBA because utilities are eligible for the MAS bands designated for private internal use and are therefore exempt from auction. See *BBA R&O*, 15 FCC Rcd 22709.

uses by examining the dominant use of the spectrum.<sup>15</sup> We concluded that examining the dominant and/or historical use of the MAS bands is a practical approach to licensing the bands by which we could better accommodate particular service demands.<sup>16</sup> In this connection, we determined that the dominant use<sup>17</sup> of the 928/952/956 MHz bands would be by entities that provide services that were private internal in nature, and thus, designated the 928/952/956 MHz bands for private internal service.<sup>18</sup> In an effort to alleviate the congestion in the highly encumbered 928/952/956 MHz bands, we provided access to additional spectrum by designating twenty channels in the 932/941 MHz bands for public safety/Federal Government and private internal services.<sup>19</sup> Additionally, we defined “private internal” for purposes of MAS in Section 101.1305 of the Rules as “a service where entities utilize frequencies purely for internal business purposes or public safety communications and not on a for-hire or for-profit basis.”<sup>20</sup>

8. Radsan provides security alarm monitoring services to control station alarm monitoring companies, such as ADT Security Systems and Security Link from Ameritech.<sup>21</sup> Other entities may use MAS frequencies as internal “links” to control their paging base stations. We did not list entities that were included within the scope of the “private internal” definition in the *MAS R&O*. As a result, Radsan has expressed concern with respect to its eligibility for the private internal MAS bands, seeking clarification that the services it provides are in fact private internal.<sup>22</sup> We will specifically address the eligibility status of the type of service provided by Radsan in an effort to clarify our intentions in this regard.

9. Discussion. As stated previously, we defined “private internal” service for purposes of MAS as “a service where licensees use their authorized frequencies purely for internal business purposes or public safety communications and not on a for-hire or for-profit basis.”<sup>23</sup> Thus, an entity may use MAS spectrum designated for internal use if the entity satisfies a two-prong test.

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<sup>15</sup> See *MAS R&O*, 15 FCC Rcd at 11963 ¶ 13.

<sup>16</sup> See *id.* at 11963 ¶ 14.

<sup>17</sup> An examination of a band’s “dominant use” for licensing purposes is the analysis of whether the majority of users within a band are qualified to obtain auction-exempt spectrum, in order to determine whether that band should be designated as auction-exempt. See *BBA R&O*, 15 FCC Rcd 22709 ¶ 73.

<sup>18</sup> *Id.* at 11966 ¶ 22, 11968 ¶ 31.

<sup>19</sup> See *id.* at 11968-11971 ¶¶ 31-38.

<sup>20</sup> 47 C.F.R. § 101.1305.

<sup>21</sup> ADT Security Systems and Link from Ameritech offer Radsan’s alarm monitoring service to their customers in conjunction with, or as an alternative to, their traditional wireline service offerings. See Radsan Petition at 2.

<sup>22</sup> See, e.g., Radsan Petition at 1, 2-7.

<sup>23</sup> 47 C.F.R. § 101.1305.

First, the spectrum must be used for either (1) internal business purposes or (2) public safety communications. We note that in the Part 90 (Private Land Mobile Radio Services) context, we described “internal systems” as systems in which all messages are transmitted between the fixed operating positions located on premises controlled by the licensee and the associated mobile stations or paging receivers of the licensee.<sup>24</sup> If the entity satisfies the first prong of the test, then we must determine whether the use of the spectrum is for-hire or for-profit. We have previously stated that a system is neither subscriber-based nor for-profit where a system (1) is only used for internal communications; and (2) is not offered to other entities for compensation.<sup>25</sup> In addition, we stated that one of the most common characteristics of private internal radio systems is that “the systems are not operated as a direct source of revenue, but rather as a means of internal communications to support the licensees’ business operations . . . .”<sup>26</sup>

10. In its petition, Radscan, a company that offers alarm monitoring services, requests confirmation that its use of MAS frequencies falls within our “private internal” definition contained in Section 101.1305 of our Rules.<sup>27</sup> According to Radscan, its frequencies are used purely for internal business purposes and points out that neither subscribers to its security service nor its

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<sup>24</sup> See 47 C.F.R. § 90.7. We believe that the Part 90 description is a useful starting point for our analysis, but concede that we may have to adapt the Part 90 description to better correspond to the types of systems used by MAS licensees.

<sup>25</sup> Viking Dispatch Services, Inc., *Memorandum Opinion and Order*, 14 FCC Rcd 18814 ¶ 3 (1999), *citing*, Implementation of Sections 3(n) and 332 of the Communications Act, *Second Report and Order*, GN Docket No. 93-252, 9 FCC Rcd 1411, 1428 ¶ 44 (1994).

<sup>26</sup> See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87, *Notice of Proposed Rulemaking*, 14 FCC Rcd at 5226 ¶ 33 (*BBA NPRM*). See also *BBA R&O*, 15 FCC Rcd 22709 ¶¶ 64-66. The Commission determined that the statutory exemption for public safety radio services applies to traditional public safety services (*i.e.*, police, fire, and emergency medical services), as well as, services designated for non-commercial use by entities (*i.e.*, utilities, railroads, transit systems and others that provide essential services to the public at large and that need reliable internal communications in order to prevent or respond to disasters or crises affecting their service to the public). In addition, the exemption applies only to services in which these public safety uses comprise the dominant use of the spectrum. Moreover, with respect to assessing applicability to future situations, the Commission determined that the exemption would apply only to spectrum that it specifically allocates for the particular uses that Congress intended to benefit. In the *BBA R&O*, “private internal radio service” is defined as “a service in which the licensee does not make a profit, and all messages are transmitted between fixed operating positions located on premises controlled by the licensee and the associated fixed or mobile stations or other transmitting or receiving devices of the licensee, or between mobile stations or other transmitting or receiving devices of the licensee.” The underlying principles of the BBA and MAS “private internal” definitions are the same. Generally, the private internal definition contained in the MAS proceeding was drafted to specifically deal with services offered under MAS while the definition in the BBA proceeding was drafted for any service. Thus, the uses that are deemed private internal in the context of MAS will also be deemed private internal with regard to examining the types of spectrum uses against the definition contained in the BBA proceeding.

<sup>27</sup> Radscan Petition at 1, 2-7.

central station customers have access to any transmission capacity on its MAS frequencies.<sup>28</sup> Furthermore, Radscan asserts that all information transmitted on its MAS frequencies is selected and formatted by Radscan and that its end-users have no choice regarding the form or content of the messages transmitted by the remote unit.<sup>29</sup>

11. Upon reviewing the record in this proceeding, we believe that Radscan uses the MAS frequencies for internal purposes. Radscan constructs a network of master stations with overlapping service contours.<sup>30</sup> Its master stations are free-standing, multi-microprocessor systems capable of responding to buffering and screening classes of messages, transmitting to remotes, communicating with other master stations, and communicating by back-up telephone modem with central stations.<sup>31</sup> Remote units in this instance are passive telemetry devices capable only of reporting the status of various sensors such as the door and window monitors or fire prevention systems to which they are connected.<sup>32</sup> Additionally, the remote units, which are installed at end-users premises, are either two-way transceivers polled by master stations, or one-way transmitters that are programmed to send messages to master stations at certain intervals.<sup>33</sup> The master stations in this instance are, arguably, located on premises controlled by Radscan and are thus consistent with the requirements for “internal” use.

12. Moreover, we believe that Radscan’s use of the MAS frequencies is not on a for-hire or for-profit basis because the system is not offered to others for a profit. A utility uses MAS frequencies for private internal uses, such as monitoring and information collection. The end-product is not delivered over the MAS frequencies to be sold for a profit like the provision of a telecommunications service<sup>34</sup> which is an end-product that is sold for a profit. Radscan’s use of the MAS frequencies is virtually indistinguishable from that of utilities in that information transmitted over the frequencies is used in conjunction with selling alarm monitoring services as an end-product, rather than a telecommunications service. In this connection, we agree with Radscan’s assertion that the MAS frequencies are a tool which facilitates the provision of the end-product.<sup>35</sup> Accordingly, we conclude that MAS frequencies in this instance are not used as a “direct source of revenue,” but rather as a means of internal communications to support a business. Therefore, Radscan’s use of the MAS frequencies is private internal and its operations are eligible

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<sup>28</sup> *Id.* at 2-3.

<sup>29</sup> *Id.* at 3-4.

<sup>30</sup> *See id.*

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> *Id.*

<sup>34</sup> 47 U.S.C. § 153. A “telecommunications service” is the offering of telecommunications for a fee directly to the public.

<sup>35</sup> *See* Radscan Petition at 6-7.

for those MAS bands designated for private internal use.<sup>36</sup>

## B. Non-Profit Shared Use and Private Carrier Service

13. Background. As stated earlier, in the *MAS R&O*, we determined that the dominant use of the 928/952/956 MHz bands is for private internal and public safety services and thus, reserved these bands and twenty channels in the 932/941 MHz bands for such use.<sup>37</sup> Additionally, we defined “private internal service” as “a service where licensees use their authorized frequencies purely for internal business purposes or public safety communications and not on a for-hire or for-profit basis.”<sup>38</sup> In this connection, we prohibited all non-private internal use by future licensees. Specifically, our revised Section 101.135(e) prohibited the provision of service on a non-profit, cost-shared basis or on a for-profit private carrier basis in the 928/952/956 MHz and twenty channels in the 932/941 MHz MAS bands which are designated for private internal services.<sup>39</sup>

### 1. Non-Profit Shared Use

14. Discussion. CICC objects to our decision prohibiting service that is provided on a non-profit, cost-shared basis.<sup>40</sup> Specifically, CICC states that we should continue to permit the licensing of non-profit, cost-shared systems in the private MAS bands by parties that are otherwise eligible for individual licensing for the private MAS bands.<sup>41</sup> CICC adds that industries that need access to the spectrum for private systems could assist the Commission in policing the use of this spectrum and protecting against “sham” private applications to abate any Commission concerns about the possibility of licensees seeking to use this spectrum to deploy for-profit systems.<sup>42</sup> Upon reviewing the record, we believe that reinstating the provision allowing non-profit, cost-shared use is in the public interest.

15. We have often encouraged employing not-for-profit, cost-sharing methodologies to promote efficient spectrum use. For instance, in a previous rule making proceeding relating to the multiple licensing of facilities and the cooperative sharing of systems in the private mobile radio service, the Commission recognized several benefits of non-profit, cost-shared systems, including

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<sup>36</sup> Any use of the MAS spectrum that we find to be substantially similar to the type of service provided by Radscan (*i.e.*, use of frequencies to support an underlying business) will also be deemed a private internal service for purposes of MAS.

<sup>37</sup> *MAS R&O*, 15 FCC Rcd at 11965 ¶ 20.

<sup>38</sup> *See supra* ¶ 7.

<sup>39</sup> *See* 47 C.F.R. § 101.135(e) (2000). *See also* *MAS R&O* at 11966 ¶ 22 and Appendix B.

<sup>40</sup> CICC Petition at 6.

<sup>41</sup> CICC Petition at 3-4, 6.

<sup>42</sup> *Id.* at 6.

better utilization of spectral resources and a less costly option than individual systems.<sup>43</sup> We have also noted that cost-shared systems may facilitate communications among public service entities, such as utilities and public safety entities, citing that shared systems will promote effective public safety communications.<sup>44</sup> Thus, we agree with CICC's assertion that restricting cost-shared systems is contrary to established Commission policies. In addition, we believe that reinstating such methodology to the 928/952/956 MHz bands and the twenty channels designated for private internal services in the 932/941 MHz MAS bands would best serve the public interest and would afford a viable option for securing spectrum in the highly encumbered private internal bands. Accordingly, we will revise our Rules consistent with the decision stated in this discussion.

## 2. *Private Carrier Service*

16. Discussion. Schlumberger disagrees with our decision to prohibit service that is provided on a for-profit private carrier basis in the private internal MAS bands, stating that we neglected to provide an adequate explanation as to why the restriction was beneficial or in the public interest in the *MAS R&O*.<sup>45</sup> Moreover, Schlumberger indicates that permitting the leasing of excess capacity encourages efficient spectrum use, permits licensees to help defray the costs of providing private internal radio services, and would be consistent with the operational flexibility provided under the new MAS rules.<sup>46</sup>

17. While we agree that there are certain benefits derived from allowing licensees to lease excess capacity, we have an obligation to balance these benefits with the capacity demands for radio spectrum. We recognize that leasing excess capacity facilitates spectrum efficiency and helps to lower the costs associated with using wireless services in connection with private business operations, however, we believe that in this particular instance, such benefits can be achieved from non-profit, cost-shared use of the private internal bands. Thus, we will deny the Petitioner's request to permit for-profit private carrier operations in the private internal MAS bands.

18. Although both uses, non-profit shared and private carriage, are extensions of spectrum sharing that offer similar advantages, we believe that a synergy exists between private internal use and non-profit use of spectrum that would support permitting cost-shared, non-profit use in the MAS bands designated for private internal use. In the context of private carrier service, however, such use is more akin to non-private internal spectrum needs because 1) it is not designed to meet a licensee's internal needs and 2) such use of spectrum is on a for-profit basis. Thus, we believe that private carrier service is a broader use of the spectrum that would, in this instance, be

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<sup>43</sup> Amendment of Parts 89, 91, 93 and 95 of the Commission's Rules and Regulations to Adopt New Practices and Procedures for Cooperative Use and Multiple Licensing of Stations in the Private Land Mobile Radio Services, *Report and Order*, Docket No. 18921, 89 FCC 2d 766 ¶¶ 36-48 (1982).

<sup>44</sup> American Electric Power Service Corporation, *Order*, 15 FCC Rcd 15553 (2000).

<sup>45</sup> Schlumberger Petition at 3-4.

<sup>46</sup> *Id.* at 4.

more appropriate in a band that supports a broader category of uses. In this connection, the MAS bands designated for non-private internal service would be a more suitable venue for private carrier service.

19. Despite our decision to reinstate non-profit, cost sharing to the private internal MAS bands, we will not reverse our previous decision to prohibit private carrier use in such bands. We note that we are not prohibiting licensees from providing private carrier service in all of the MAS bands. We are merely barring future licensees in the MAS bands that are designated for private internal service from providing private carrier service. In this regard, we deny Petitioner's request to allow private carrier service on the MAS bands designated for private internal use.

20. Additionally, we will, on our own motion, modify our Rules to emphasize that grandfathered operations cannot be modified in a manner that is inconsistent with our current Rules. In this connection, operators in the private internal bands are prohibited from acquiring new frequencies for the purpose of expanding private carrier service in the private internal bands and from changing the use of their frequencies in any manner that violates our Rules.

### C. Treatment of Incumbents

21. Background. In the *MAS R&O*, we added Section 101.1331 to our Rules which, among other things, discusses incumbent operators in the 928/952/956 MHz bands. Specifically, we permit incumbent operators in the 928/952/956 MHz bands to operate and expand their systems in accordance with the interference protection and co-channel spacing criteria set forth in Section 101.105 of our Rules.<sup>47</sup> In addition, we define "incumbent" as any station licensed by the Commission prior to July 1, 1999, as well as, any assignments or transfers of such station as of January 19, 2000.<sup>48</sup>

22. Although our Rules allow operators in the 928/952/956 MHz bands to assign their licenses to anyone (subject to the Commission's approval), Section 101.1331 creates the possibility that the new licensee will no longer qualify as an incumbent if the transfer occurs after January 19, 2000. Therefore, if the new operator is not an incumbent, then its operations will not be grandfathered and the operator would have to comply with our current eligibility requirements for the 928/952/956 MHz bands, *i.e.*, private internal service.

23. Discussion. Both Schlumberger and Radscan urge us to reconsider our Rules with respect to transfers and assignments to ensure that the transfer of licenses and the systems associated with them, does not alter the availability of such networks for continued use, regardless of the eligibility of the transferee or assignee to apply for new 928/952 MHz licenses.<sup>49</sup> Specifically, Schlumberger states that we should extend grandfathering protections in the 928/952 MHz bands to all licenses that are subject to transfers of control or assignments if the original use

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<sup>47</sup> 47 C.F.R. § 101.1331(b) (2000).

<sup>48</sup> 47 C.F.R. § 101.1331(a) (2000). January 19, 2000 is the release date of the *MAS R&O*.

<sup>49</sup> See Schlumberger Petition at 2, 4-7; Radscan Petition at 7-9.

of the license will remain unchanged because the current rules bar the sale of a grandfathered business that relies on MAS licensed facilities with incumbency status.<sup>50</sup>

24. We agree with Schlumberger's assertion that the effect of Section 101.1331(b) may preclude the eligibility of certain subsequent transferees and/or assignees for the 928/952/956 MHz private internal MAS bands if such transfer did not occur as of January 19, 2000. Additionally, we realize that the effect of our Rules may inhibit the future business plans and transactions of some MAS licensees. In an effort to alleviate this result, we will modify our Rules by extending the privileges of grandfathered incumbents in the 928/952/956 MHz bands to transferees and/or assignees of incumbents and their successors whose MAS operations remain unchanged. In this connection, we will not prohibit the transfer and/or assignment of licenses held by incumbents in the private internal MAS bands to entities seeking to employ non-private internal uses. Our purpose for grandfathering operations in the 928/952/956 MHz bands in the *MAS R&O* was to restrict the extent to which our policies may adversely affect non-private internal operations and the business plans of those licensees. Thus, our intention was to protect the operations of the existing licensees. However, upon reviewing the record, we believe that modifying our current regulations to accommodate and protect the operations of transferees and/or assignees of the incumbent operators and their successors in the 928/952/956 MHz band would be more equitable and less onerous to existing users. In addition, this approach ensures that all existing MAS operations are better protected and is thus, in the public interest. We emphasize that new licensees outside the transfer/assignment context as set forth herein will be required to satisfy the eligibility requirements of the MAS bands for which they are applying.

25. Moreover, on our own motion, we will take this opportunity to clarify Section 101.1331(a) of our Rules. Section 101.1331(a) reads as follows: "Any station licensed by the Commission prior to July 1, 1999, as well as any assignments or transfers of such station as of January 19, 2000, shall be considered incumbent."<sup>51</sup> In this regard, we clarify that assignments of the subject stations or transfers of control must have been approved by the Commission and consummated as of January 19, 2000 to be eligible for incumbency status. *Pro forma* transactions involving non-substantial changes will not affect the eligibility status of an MAS operator. We believe that these revisions are in the public interest as they will foster a better understanding of our intentions for incumbents and will provide a clearer standard by which the public can easily

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<sup>50</sup> Schlumberger Petition at 4-5. *See also* Radscan Petition at 7-8. Radscan states that if its use of MAS frequencies is not considered a "private internal service," then it seeks reconsideration of Section 101.1331 to the extent that the rule may be interpreted as stripping Radscan of its grandfathered status by virtue of the recently consummated Honeywell/Pittway merger. Radscan further states that the Commission should clarify that a transfer of control of the parent company of a MAS incumbent licensee, (whether or not the transfer occurs after January 19, 2000), does not eliminate the licensee's grandfathered status under Section 101.1331(b) as long as the underlying use of the MAS licensee's frequencies remains the same. *Id.* As indicated herein, we determined that Radscan's use of the MAS frequencies is private internal. *See supra* ¶ 12. In this regard, we do not believe that a detailed analysis of Radscan's assertions is warranted because they seek reconsideration in the instance that their use of the MAS frequencies is deemed something other than "private internal."

<sup>51</sup> *See* 47 C.F.R. 101.1331(a).

discern incumbents from non-incumbents.

#### D. Service Areas

26. Background. In the *MAS R&O*, we determined that EAs constitute the most appropriate geographic area licensing boundaries for the portions of the MAS bands that were designated for geographic area licensing.<sup>52</sup> We stated that EAs are large enough to permit wide-area service, small enough to provide an opportunity for small businesses to obtain a license, and mirror the size and development of existing MAS systems.<sup>53</sup> In this connection, we adopted the proposal to use a total of 175 service areas – 172 EAs specified by the Department of Commerce and three EA-like areas for Guam and the Northern Marianas Islands, Puerto Rico and the United States Virgin Islands, and American Samoa.<sup>54</sup> CICC believes we should add an “EA-like” area to comprise the Gulf of Mexico.<sup>55</sup> CICC believes that all MAS channels should be available for licensing in the Gulf of Mexico.<sup>56</sup>

27. Discussion. Upon further review of this issue, we believe that adding an EA-like area comprised of the Gulf of Mexico for MAS would serve the public interest. CICC avers that adding one EA-like area comprised of the Gulf of Mexico would maximize the range of communications options available to the Gulf population and would promote consistency with the service areas available for private internal MAS use.<sup>57</sup>

28. We agree. The Gulf area has experienced increased demand for voice, data and video telecommunications services.<sup>58</sup> As a result of this growth, we have in other wireless services recognized the benefits of creating an EA-like area.<sup>59</sup> Because creating a separate service area covering the Gulf of Mexico region is consistent with our approach in other wireless services,<sup>60</sup> we

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<sup>52</sup> *MAS R&O*, 15 FCC Rcd at 11982-83 ¶ 68. See also 47 C.F.R. § 101.1315 (2000).

<sup>53</sup> *MAS R&O* at 11982-83 ¶ 68.

<sup>54</sup> *Id.* See also 47 C.F.R. § 101.1315.

<sup>55</sup> CICC Petition at 12-13.

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* at 13.

<sup>58</sup> See Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service, *Report and Order*, GN Docket No. 96-228, 12 FCC Rcd 10785 (1997).

<sup>59</sup> See Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service, *Report and Order*, GN Docket No. 96-228, 12 FCC Rcd 10785 (1997); Amendment to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Report and Order*, 15 FCC Rcd 16934 (2000).

<sup>60</sup> See Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service,

will revise our Rules to designate a separate EA covering the Gulf of Mexico for MAS. In this connection, we will license the 928/959 MHz bands and twenty channels in the 932/941 MHz bands that will be licensed on a geographic area basis using a total of 176 service areas—the 172 EAs specified by the Department of Commerce and four EA-like areas for Guam and the Northern Marianas Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico. We note that an agreement exists between the United States and Mexico which includes the twenty channels in the 932/941 MHz bands that we will make available for licensing on a geographic area basis in the Gulf of Mexico region.<sup>61</sup> In this regard, Mexico has primary use of these frequencies and use by the United States is secondary within a distance of 113 kilometers of its side of the common border.<sup>62</sup>

### E. Operational Flexibility

29. Background. Previously, the rules governing MAS permitted uses of certain MAS channels other than standard point-to-multipoint transmissions on a limited basis.<sup>63</sup> For instance, the Commission permitted the operation of mobile master stations in the 956 MHz MAS band on a primary basis and in the 952 MHz MAS band on a case-by-case basis.<sup>64</sup> In addition, mobile operation in the 952 MHz band was allowed on a secondary basis to fixed operations.<sup>65</sup> In the *MAS R&O*, we changed the Rules by affording additional operational flexibility to foster the introduction of more varied uses of the MAS bands.<sup>66</sup> Specifically, we revised Section 101.105(c)(5) of our Rules to permit mobile operation on any of the MAS frequency bands on a primary basis.<sup>67</sup>

30. Discussion. CICC requests that we reconsider our decision to allow two-way mobile dispatch operations in the private internal bands, averring that we should not expand the

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*Report and Order*, GN Docket No. 96-228, 12 FCC Rcd 10785 (1997); Amendment to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Report and Order*, 15 FCC Rcd 16934 (2000).

<sup>61</sup> See Agreement Between the Government of the United States of America and the Government of the United Mexican States Concerning the Allotment and Use of Channels in the 932-932.5 and 941-941.5 MHz bands for Fixed Point-to-Multipoint Services Along the Common Border (June 16, 1994).

<sup>62</sup> *Id.* at 2, Appendix. Mexico has primary use of channels in the 932.00625/941.00625-932.24375/941.24375 MHz bands. The United States may use these frequencies on a secondary basis within a distance of 113 km of its side of the common border.

<sup>63</sup> See *MAS R&O*, 15 FCC Rcd at 11999 ¶ 101. See also 47 C.F.R. § 101.105(c)(5) (1999). We permitted mobile operations on certain paired channels, as well as, certain point-to-point operations on a secondary basis.

<sup>64</sup> See 47 C.F.R. § 101.105(c)(5) (1999).

<sup>65</sup> *Id.*

<sup>66</sup> See *MAS R&O*, 15 FCC Rcd at 11999 ¶ 103.

<sup>67</sup> See *id.*, 47 C.F.R. § 101.105(c)(5) (2000).

permissible mobile operations in the site-based MAS bands.<sup>68</sup> CICC is concerned that the co-channel separation requirements are not sufficient to protect point-to-multipoint MAS operations from interference from two-way mobile systems.<sup>69</sup> In addition, CICC states that two-way dispatch mobile type system transmitters are more likely to be operated outside of their coordinated areas and, as a result, may cause co-channel or adjacent-channel interference to critical point-to-multipoint MAS operations.<sup>70</sup>

31. All of the comments received addressing mobile operations in the MAS service opposed the Commission's modifications with respect to this issue.<sup>71</sup> Thus, upon further examination of this issue, we believe that the current regulatory regime for mobile operations in the private internal MAS bands may actually increase the potential for interference to nearby operations. We agree with CICC's assertion that a mobile master MAS station typically communicates with fixed, low power, remote units employing directional antennas, while, two-way dispatch operations generally entail numerous mobile units operating at full power and employing omni-directional antennas, thus, creating a greater risk of interference to neighboring operations.<sup>72</sup> In addition, we concede that regulating mobile remote units is challenging because identifying and rectifying interference to point-to-multipoint MAS systems by these units can be extremely difficult.<sup>73</sup> Mobile remote units are often controlled by customers who may be less familiar with Commission rules and their authorized service areas rather than the licensees of the master stations. In light of these concerns about the heightened potential for interference created by relaxed policies for operating mobile remote units, we will grant CICC's petition by retracting the policies that created the additional flexibility.

32. Thus, we will allow mobile master MAS stations in the 956.25-956.45 MHz MAS band on a primary basis. We will permit primary mobile master MAS stations in the 952 MHz and on the site-based channels in the 941 MHz MAS bands on a case-by-case basis, if the 956.25-956.45 MHz frequencies are unavailable. We will retain our decision to allow mobile operation on frequencies licensed by geographic area to the extent that such operation does not cause harmful interference to adjacent channel, site-based licensees and co-channel adjacent EA licensees. However, we will clarify our Rules to indicate that mobile operation for site-based licensees in the 959.85-960 MHz band will be prohibited. Hence, we will revise the Rules pursuant to the policy decisions described in this section.

33. Additionally, we are making editorial amendments to Section 101.107 of our Rules

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<sup>68</sup> CICC Petition at 7, 12.

<sup>69</sup> *Id.* at 9.

<sup>70</sup> *Id.* at 10.

<sup>71</sup> *See* CICC Petition at 9-12.

<sup>72</sup> *Id.* at 10.

<sup>73</sup> *See id.*

to conform them with our decisions in the *MAS R&O*, thereby, clarifying the permissible frequency tolerance levels for MAS operations. Specifically, we will make appropriate changes to the frequency tolerance levels denoted in the table contained in Section 101.107(a), as well as, indicate that such levels are applicable to all (928/952/956 MHz, 928/959 MHz, 932/941 MHz) of the MAS bands. We consider these revisions to be non-substantive in nature and in the public interest as they will facilitate our efforts to address the concerns raised in the CICC petition with respect to mitigating instances of interference to MAS systems.

## F. Other Matters

### 1. Frequency Assignments

34. Note 28 was added to Section 101.147 of our Rules to revise the frequency assignments listing so that it reflects the new eligibility criteria for the 928/952/956 MHz bands. Section 101.1331(a) was added to our Rules to define “incumbent” licensee for the purposes of determining whether operations in the 928/952/956 MHz and 928/959 MHz bands will be grandfathered. When the *MAS R&O* was initially released, the first sentence of Section 101.147, Note 28 of the Commission’s rules provided that “Subsequent to July 1, 1999, MAS operations, as defined in § 101.1331(a), in the 928/952/956 MHz bands are reserved for private internal use.”<sup>74</sup> This reference may have been inappropriate and/or misleading because Section 101.1331(a) provides a definition of incumbent operations, for the purposes of determining which licensees are subject to grandfather rights, rather than a definition of which MAS licensees should be limited to private internal operations.

35. CICC requests that we clarify Section 101.147, Note 28 of the Rules to clearly indicate which licensees should be limited to private internal operations.<sup>75</sup> We believe that CICC’s suggestion to use the following language “Licensees that obtain authorizations in the 928/952/956 MHz MAS bands subsequent to July 1, 1999 are limited to private internal services, as defined in Section 101.1305. Incumbent operations in the 928/952/956 MHz MAS bands, as defined in Section 101.1331(a), are subject to grandfather rights pursuant to Section 101.1331” would clarify our original intentions when we initially modified this notation.<sup>76</sup> Hence, our Rules will be revised accordingly.

### 2. Suspension of the Acceptance and Processing of MAS Applications

36. As stated earlier, the Commission previously suspended the acceptance and processing of MAS applications for new licenses, amendments, or modifications in the 932/941 MHz bands, the 928/959 MHz bands and applications to provide subscriber-based service in the

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<sup>74</sup> 47 C.F.R. § 101.147 n.28. See also *MAS R&O* – Appendix B, modified by, *Erratum*, 15 FCC Rcd 16415 (2000).

<sup>75</sup> CICC Petition at 13.

<sup>76</sup> *Id.* at 14.

928/952/956 MHz bands pending resolution of the issues outlined in the *Notice*.<sup>77</sup> In the *Further Notice*, the Commission extended this “application freeze” to include all MAS bands regardless of the type of service proposed.<sup>78</sup>

37. In the subsequent *MAS R&O*, we modified the licensing approach for 928/959 MHz MAS spectrum from site-based to geographic area, indicating that this new licensing approach would best accommodate the current and future uses of the band.<sup>79</sup> We also grandfathered the existing MAS incumbents in the 928/959 MHz band,<sup>80</sup> and decided that even after the transition to geographic area licensing, incumbents in the 928/959 MHz bands would be permitted to make certain modifications to existing systems as long as the signal level is not increased beyond the incumbent’s 25-mile service area.<sup>81</sup> We did not, however, modify the freeze on applications for new licenses or license modifications in the 928/959 MHz bands.<sup>82</sup>

38. Hence, we are now taking this opportunity to modify the suspension of the acceptance and processing of MAS applications for the 928/959 MHz bands to permit grandfathered licensees in these bands to modify their operations in accordance with our Rules without applying for a waiver of the application freeze. We intended to permit grandfathered licensees in this band to modify their systems in accordance with the criteria outlined in the Rules, previously.<sup>83</sup> Thus, we believe that this action is non-substantive in nature and in the public interest because we are fostering consistency among the MAS service rules. Accordingly, we will create an exception to the application freeze for certain grandfathered licensees in the 928/959 MHz bands and will accept for filing and process applications to modify operations in accordance with Section 101.1331(c) of our Rules.<sup>84</sup>

#### IV. CONCLUSION

39. In the *MAS MO&O*, we conclude that the type of service provided by Radscan on MAS frequencies is a private internal use in the context of MAS. This clarification better explains our position with respect to the intended users of the private internal MAS bands and enhances the ability of current and future MAS licensees to acquire MAS spectrum. In addition, we reinstate

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<sup>77</sup> *See supra* ¶ 3.

<sup>78</sup> *Id.* ¶ 5. The suspension of the 928/959 MHz band was not affected by the *Further Notice*.

<sup>79</sup> *See MAS R&O*, 15 FCC Rcd at 11974 ¶ 47.

<sup>80</sup> *Id.* at 11977 ¶ 55 (“allowing incumbent MAS operators on the 928/959 MHz band . . . to continue operations on these bands is in the public interest”).

<sup>81</sup> *Id.* at 11980 ¶ 62.

<sup>82</sup> *Id.* at 12005 ¶ 115.

<sup>83</sup> *See supra* ¶ 37.

<sup>84</sup> *See* 47 C.F.R. § 101.1331(c) (2000).

non-profit, cost-shared use in the private internal bands. We believe that this type of spectrum use serves the public interest and affords a vital alternative for securing MAS spectrum in the highly encumbered private internal bands. Moreover, we create an EA-like area covering the Gulf of Mexico which will ensure that the wireless needs of this region are better met. With regard to the MAS operational policies, we retract some of the policies that were relaxed in the *MAS R&O* and introduce policies that may be described as less flexible. However, it is our belief that the changes to the operational policies mitigate potential instances of interference among MAS users and will ultimately benefit all MAS users.

40. Our action today will enable the MAS service to effectively accommodate the wireless communications needs of its various users. Overall, the proposals set forth herein will not only enable us to better serve current and future MAS licensees, but will help conserve scarce Commission resources, thereby, advancing our spectrum management goals, including fostering efficient and effective radio operations.

## V. PROCEDURAL MATTERS

### A. Final Regulatory Flexibility Act

41. Appendix C contains a Supplemental Final Regulatory Flexibility Analysis with respect to the *MAS Memorandum Opinion and Order*.

### B. Information Contacts

42. For further information concerning this *Memorandum Opinion and Order*, contact Shellie Blakeney, Policy and Rules Branch, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, at (202) 418-0680, TTY (202) 418-7233, or via e-mail at [sblakene@fcc.gov](mailto:sblakene@fcc.gov).

43. Alternative formats are available to persons with disabilities by contacting Jenifer Simpson at (202) 418-0008, TTY (202) 418-2555. This *Memorandum Opinion and Order* can be downloaded at <http://www.fcc.gov/Wireless/Orders/2001>.

**VI. ORDERING CLAUSES**

44. Accordingly, IT IS ORDERED that, pursuant to the authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303, and Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, the Petition for Reconsideration filed by CellNet Data Systems, Inc. on May 3, 2000, is GRANTED IN PART, consistent with the decisions set forth herein.

45. IT IS FURTHER ORDERED that, pursuant to the authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303, and Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, the Petition for Clarification and Reconsideration filed by Radscan, Inc. on May 3, 2000 is GRANTED, consistent with the decisions set forth herein.

46. IT IS FURTHER ORDERED that, pursuant to the authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303, and Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, the Petition for Reconsideration/Clarification filed by the Critical Infrastructure Communications Coalition on May 3, 2000, is GRANTED, consistent with the decisions set forth herein.

47. IT IS FURTHER ORDERED that, pursuant to the authority contained in Sections 4(i) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) and 303, and Section 1.429 of the Commission's Rules, 47 C.F.R. § 1.429, the Petition for Reconsideration/Clarification filed by the United States Environmental Protection Agency on February 7, 2000, is DISMISSED, as moot.

48. IT IS FURTHER ORDERED that, pursuant to the authority contained in Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), the application freeze set forth in the *Notice of Proposed Rule Making* in WT Docket No. 97-81, is MODIFIED, as set forth herein.

49. IT IS FURTHER ORDERED that, Part 101 of the Commission's rules is AMENDED, as set forth in Appendix B, effective sixty days after its publication in the Federal Register.

50. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this *Memorandum Opinion and Order*, including the Supplemental Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

51. IT IS FURTHER ORDERED that the above-captioned proceeding is TERMINATED.

FEDERAL COMMUNICATIONS COMMUNICATION

Magalie Roman Salas  
Secretary

**APPENDIX A – PETITIONERS/COMMENTERS**

## A. PETITIONS

CellNet Data Systems, Inc. (Schlumberger)	May 3, 2000
Critical Infrastructure Communications Coalition	May 3, 2000
American Gas Association	
American Petroleum Institute	
American Public Power Association	
American Water Works Association	
Association of American Railroads	
Association of Oil Pipe Lines	
Edison Electric Institute	
Interstate Natural Gas Association of America	
National Association of Water Companies	
United Telecom Council	
Radscan, Inc.	May 3, 2000
United States Environmental Protection Agency	February 7, 2000

## B. EXPARTE COMMENTS/PRESENTATIONS

American Petroleum Institute	October 4, 2000
American Petroleum Institute and United Telecom Council	April 27, 2000
American Petroleum Institute and United Telecom Council	April 6, 2000
GTECH Corporation	October 3, 2000
Niagara Mohawk Power Corporation, Public Service Electric & Gas Company, United Telecom Council, Wisconsin Public Service Corporation	March 8, 2000

APPENDIX B – FINAL RULES

For reasons discussed in the preamble, the Federal Communications Commission amends 101 as follows:

**PART 101 – FIXED MICROWAVE SERVICES**

1. Section 101.105 is amended by revising (c)(5) to read as follows:

**§ 101.105 Interference protection criteria.**

\* \* \* \* \*

(c) \* \* \*

\* \* \* \* \*

(5) Multiple address frequencies in the 956.25-956.45 MHz bands may be assigned for use by mobile master stations on a primary basis. Multiple address frequencies in the 941.0-941.5 MHz bands that are licensed on a site-by-site basis and the 952 MHz bands may be assigned for use by primary mobile master stations on a case-by-case basis if the 956.25-956.45 MHz frequencies are unavailable. Multiple address mobile (master and remote) operation is permitted on frequencies licensed by geographic area subject to the interference protection criteria set forth in Section 101.1333, *i.e.*, adjacent channel site-based licensees and co-channel operations in adjacent EAs. Mobile operation in the 959.85-960 MHz band is not permitted.

\* \* \* \* \*

2. Section 101.107(a) is amended by revising the first six rows and footnotes (5) and (7) to read as follows:

**§ 101.107 Frequency tolerance.**

(a) \* \* \*

Frequency (MHz)	Frequency Tolerance (percent)		
	All fixed and base stations	Mobile stations over 3 watts	Mobile stations 3 watts or less
928 to 929 (2)(5)	0.0005	.....	.....
932 to 932.5 (2)	0.00015	.....	.....
932.5 to 935 (2)	0.00025	.....	.....
941 to 941.5	0.00015	.....	.....
941.5 to 944	0.00025	.....	.....
952 to 960 (7)	.....	.....	.....
* * *			
* * *			

(5) Used for remote stations. For remotes with 12.5 KHz bandwidth or less, the tolerance is ±0.00015%.

\* \* \*

(7) For private operational fixed point-to-point microwave systems, with a channel greater than or equal to 50 KHz bandwidth, ±0.0005%; for multiple address master stations, regardless of bandwidth, ±0.00015%; for multiple address remote stations with 12.5 KHz bandwidths or less, ±0.00015%; for multiple address remote stations with channels greater than 12.5 KHz bandwidth, ±0.0005%.

\* \* \* \* \*

3. Section 101.113(a) is amended revising the first six rows as follows:

**§ 101.113 Transmitter power limitations.**

(a) \* \* \*

Frequency Band (MHz)	Maximum allowable EIRP (1) (2)	
	Fixed (dBW)	Mobile (dBW)
928.0-929.0 (2)	+17	.....
932.0-932.5 (2)	+17	.....
932.5-935.0	+40	.....
941.0-941.5 (2)	+30	+14
941.5-944.0	+40	.....
952.0-960.0 (2)	+40	+14
* * * * *		

4. Section 101.135 is amended by revising paragraph (e) to read as follows:

**§ 101.135 Shared use of radio stations and the offering of private carrier service.**

\* \* \* \* \*

(e) Applicants licensed in the MAS frequencies after June 2, 2000, shall not provide service to others on a for-profit private carrier basis in the 928-928.85/952-952.85/956.25-956.45 MHz bands and the 932.25-932.5/941.25-941.5 MHz bands.

5. Section 101.147 is amended by revising note (28) in paragraph (a) and revising paragraph (b) to read as follows.

**§ 101.147 Frequency assignments.**

(a) \* \* \*

\* \* \* \* \*

(28) Licensees that obtain authorizations in the 928/952/956 MHz MAS bands subsequent to July 1, 1999

are limited to private internal services, as defined in Section 101.1305. Incumbent operations in the 928/952/956 MHz MAS bands, as defined in Section 101.1331(a), are subject to grandfather rights pursuant to Section 101.1331. The 928.85 - 929.0 MHz and 959.85 - 960.0 MHz bands are licensed on a geographic area basis with no eligibility restrictions. The 928.0 - 928.85 MHz band paired with the 952.0 - 952.85 MHz band, in addition to unpaired frequencies in the 956.25 - 956.45 MHz band, are licensed on a site-by-site basis and used for terrestrial point-to-point and point-to-multipoint fixed and limited mobile operations. The 928.85 - 929.0 MHz band paired with the 959.85 - 960.0 MHz band is licensed by Economic Area and used for terrestrial point-to-point and point-to-multipoint fixed operations.

(b) Frequencies normally available for assignment in this service are set forth with applicable limitations in the following tables: 928-960 MHz Multiple address system (MAS) frequencies are available for the point-to-multipoint and point-to-point transmission of a licensee's products or services, excluding video entertainment material, to a licensee's customer or for its own internal communications. The paired frequencies listed in this section are used for two-way communications between a master station and remote stations. Ancillary one-way communications on paired frequencies are permitted on a case-by-case basis. Ancillary communications between interrelated master stations are permitted on a secondary basis. The normal channel bandwidth assigned will be 12.5 kHz. EA licensees, however, may combine contiguous channels without limit or justification. Site-based licensees may combine contiguous channels up to 50 kHz, and more than 50 kHz only upon a showing of adequate justification. Any bandwidth (12.5 kHz, 25 kHz or greater) authorized in accordance with this section may be subdivided into narrower bandwidths to create additional (or sub) frequencies without the need to specify each discrete frequency within the specific bandwidth. Equipment that is used to create additional frequencies by narrowing bandwidth (whether authorized for a 12.5 kHz, 25 kHz or greater bandwidth) will be required to meet, at a minimum, the  $\pm$  0.00015 percent tolerance requirement so that all subfrequencies will be within the emission mask. Systems licensed for frequencies in these MAS bands prior to August 1, 1975, may continue to operate as authorized until June 11, 1996, at which time they must comply with current MAS operations based on the 12.5 kHz channelization set forth in this paragraph. Systems licensed between August 1, 1975, and January 1, 1981, inclusive, are required to comply with the grandfathered 25 kHz standard bandwidth and channelization requirements set forth in this paragraph. Systems originally licensed after January 1, 1981, and on or before May 11, 1988, with bandwidths of 25 kHz and above, will be grandfathered indefinitely.

\* \* \* \* \*

6. Section 101.1307 is amended to read as follows:

**§ 101.1307 Permissible communications.**

MAS users may engage in terrestrial point-to-point and point-to-multi-point fixed and limited mobile operations.

7. Section 101.1315 is amended to read as follows:

**§ 101.1315 Service areas.**

In the frequency bands not licensed on a site-by-site basis, the geographic service areas for MAS are Economic Areas (EAs) which are defined by the Department of Commerce's Bureau of Economic Analysis, as modified by the Commission. The EAs will consist of 176 areas, which includes Guam and

the Northern Marianas Islands, Puerto Rico and the United States Virgin Islands, American Samoa, and the Gulf of Mexico.

8. Section 101.1331 is amended to read as follows:

**§ 101.1331 Treatment of incumbents.**

- (a) Any MAS station licensed by the Commission prior to July 1, 1999 in the 928.0-928.85 MHz/952.0-952.85 MHz/956.25-956.45 MHz and 928.85-929.0 MHz/959.85-960.0 MHz bands, as well as assignments or transfers of such stations approved by the Commission and consummated as of January 19, 2000, shall be considered incumbent.
- (b) Incumbent operators in the 928.0-928.85 MHz/952.0-952.85 MHz /956.25-956.45 MHz bands are grandfathered as of January 19, 2000, and may continue to operate and expand their systems pursuant to the interference protection and co-channel spacing criteria contained in § 101.105.
  - (1) MAS operators are prohibited from acquiring additional frequencies in the 928.0-928.85 MHz/952.0-952.85 MHz/956.25-956.45 MHz bands and the 932.25625-932.49375 MHz/941.25625-941.49375 MHz bands for the purpose of expanding private carrier service and from changing the use of their frequencies in any manner that is inconsistent with this part. Refer to § 101.147 of this part for designated uses.
  - (2) Incumbent operators in the 928.0-928.85 MHz /952.0-952.85 MHz/956.25-956.45 MHz bands will include incumbents as defined in subsection (a) of section 101.1331, as well as, their transferees and/or assignees and the successors of the transferees and/or assignees and retain their grandfathered status, provided that the use of the MAS frequencies remains unchanged from that of the transferor and/or assignor of the license.

\* \* \* \* \*

**APPENDIX C – SUPPLEMENTAL FINAL REGULATORY FLEXIBILITY ANALYSIS***Memorandum Opinion and Order*

1. As required by the Regulatory Flexibility Act (RFA),<sup>85</sup> Initial Regulatory Flexibility Analyses (IRFA) were incorporated in the Amendment of the Commission's Rules Regarding Multiple Address Systems, *Notice of Proposed Rule Making and Further Notice of Proposed Rule Making*.<sup>86</sup> The Commission sought written public comment on the proposals in the *Notice* and *Further Notice*, including comment on the IRFA. This present Supplemental Final Regulatory Flexibility Analysis (Supplemental FRFA) conforms to the RFA.<sup>87</sup>

**I. Reason for, and Objectives of, the *Memorandum Opinion and Order*.**

2. These proceedings were initiated to secure public comment on proposals to maximize the efficient and effective use of spectrum allocated to Multiple Address Systems (MAS) in the Microwave Services and to analyze the impact of the Balanced Budget Act on these proposals. The rules adopted in this *Memorandum Opinion and Order* continue our efforts to promote effective radio operations, improve the efficiency of spectrum use and reduce the regulatory burden on spectrum users.

**II. Summary of Significant Issues Raised by Public Comments in Response to the Previous Final Regulatory Flexibility Analysis.**

3. No reconsideration petitions/comments were filed in direct response to the previous Final Regulatory Flexibility Act (FRFA). However, the Commission has reviewed general comments that may impact small businesses. In this instance, the petitioners are existing MAS licensees, many of whom qualify as small businesses. Generally, the petitioners applaud the Commission's efforts in this service. The requests for reconsideration and/or clarification involve issues relating to the types of services classified as private internal, grandfathering provisions as they relate to transfers and assignments, shared use and private carrier service in the private internal bands, operational flexibility, service area coverage of the Gulf of Mexico and other minor points that will help clarify our intentions for this service. In addition, this *Memorandum Opinion and Order* makes minor changes to certain technical requirements in Part 101, as well as, the current application freeze in certain MAS bands in an effort to promote effective radio operations and to reduce regulatory burdens on MAS licensees.

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<sup>85</sup> See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

<sup>86</sup> Amendment of the Commission's Rules Regarding Multiple Address Systems, *Further Notice of Proposed Rule Making*, 14 FCC Rcd 10744 (1999) (*Further Notice*); *Notice of Proposed Rule Making*, 12 FCC Rcd 7973 (1997) (*Notice*).

<sup>87</sup> See 5 U.S.C. § 604.

### III. Description and Estimate of the Number of Small Entities to which the Rules Will Apply.

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act, unless the Commission has developed one or more definitions that are appropriate for its activities.<sup>88</sup> Under the Small Business Act, a “small business concern” is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>89</sup> A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”<sup>90</sup>

5. Last, the definition of “small governmental entity” is one with populations of fewer than 50,000.<sup>91</sup> There are 85,006 governmental entities in the nation.<sup>92</sup> This number includes such entities as states, counties, cities, utility districts and school districts. There are no figures available on what portion of this number has populations of fewer than 50,000. However, this number includes 38,978 counties, cities and towns, and of those, 37,556, or ninety-six percent, have populations of fewer than 50,000.<sup>93</sup> The Census Bureau estimates that this ratio is approximately accurate for all government entities. Thus, of the 85,006 governmental entities, we estimate that ninety-six percent, or about 81,600, are small entities that may be affected by our rules. Below, we further describe and estimate the number of small business licensees and regulatees that may be affected by the rules.

6. The rules adopted in this *Memorandum Opinion and Order* affect a number of small entities that are either licensees, or may choose to become applicants for licenses, in the MAS Service. Such entities, in general, fall into two categories: (1) those using MAS spectrum for profit-based uses and (2) those using MAS spectrum for private internal uses.

7. With respect to the first category, we note that the Commission has developed and

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<sup>88</sup> See 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

<sup>89</sup> Small Business Act, 15 U.S.C. § 632 (1996). See, e.g., *Brown Transport Truckload, Inc. v. Southern Wipers, Inc.*, 176 B.R. 82, 89 (N.D. Ga. 1994).

<sup>90</sup> 5 U.S.C. § 601(4).

<sup>91</sup> 5 U.S.C. § 601(5).

<sup>92</sup> 1992 Census of Governments, U.S. Bureau of the Census, U.S. Department of Commerce.

<sup>93</sup> *Id.*

received approval from the Small Business Administration for two definitions of small entities applicable to MAS licensees that do not provide private internal service.<sup>94</sup> The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of January 20, 1999, there were a total of 8,670 MAS station authorizations. Of these, 260 authorizations were associated with common carrier service.

8. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, we note that MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate. The applicable definition of small entity in this instance appears to be the definition under the SBA rules applicable to establishments engaged in radiotelephone communications. This definition provides that a small entity is any entity employing no more than 1,500 persons.<sup>95</sup> The Commission's licensing database indicates that, as of January 20, 1999, of the 8,670 total MAS station authorizations, 8,410 authorizations were for private radio service, and of these, 1,433 were for private land mobile radio service.

#### **IV. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements.**

9. This *Memorandum Opinion and Order* requires MAS licensees that are operating in the MAS spectrum designated for private internal use to limit mobile operations to mobile master stations only, for the 952 MHz and certain channels in the 941 MHz bands, if frequencies in the 956 MHz band are unavailable. In addition, the *Memorandum Opinion and Order* prohibits mobile operation for site-based licensees in the 959 MHz band and modifies permissible frequency tolerance levels for MAS operations to conform with the *MAS Report and Order*. Compliance with these modifications to the Commission's rules, as well as the other modifications described in the *MAS Memorandum Opinion and Order*, will facilitate efficient radio operations by reducing opportunities for radio interference.<sup>96</sup>

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<sup>94</sup> Letter from Aida Alvarez, Administrator, Small Business Administration to Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission (June 4, 1999).

<sup>95</sup> See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812.

<sup>96</sup> We note that in the *MAS Report and Order*, the Commission requires any small business applicant wishing to avail itself of small business provisions to make the general financial disclosures necessary to establish that the small business is in fact small. See 47 C.F.R. Part 1, Subpart Q (competitive bidding procedures). For instance, prior to auction, each small business applicant will be required to submit an FCC Form 175, OMB Clearance Number 3060-0600. In addition to filing an FCC Form 175, each applicant must submit information regarding the ownership of the applicant, any joint venture arrangements or bidding consortia that the applicant has entered into, and financial information which demonstrates that a business wishing to qualify for bidding credits is a small business. When an applicant wins a license, it will be required to submit an FCC Form 601 (Long-form Application for Authorization), which will require technical information regarding the applicant's proposals for providing service. MAS applicants and/or

## V. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered.

11. We have reduced the economic burden placed on small businesses where possible. In response to petitions/comments filed in this proceeding, we have adopted rule modifications that will, through more effective radio operations and a reduction of regulatory burdens, foster the growth of small businesses providing wireless services. For instance, this *Memorandum Opinion and Order* eliminates the requirement for licensees to submit waiver requests 1) to operate mobile master stations in certain MAS bands and 2) to expand systems in the 928/959 MHz MAS bands as described in the Commission's rules.<sup>97</sup> This action, in turn, will reduce administrative burdens for MAS licensees, as well as, the Commission, which will ultimately result in less economic burden on MAS licensees. Additionally, we are providing specific parameters for mobile operations in this service which will assist small businesses by mitigating instances of potential interference, thus preserving valuable resources.

**Report to Congress:** The Commission will send a copy of the *MAS Memorandum Opinion and Order*, including this Supplemental FRFA, in a report to be sent to Congress pursuant to the Small Business Enforcement Fairness Act of 1996.<sup>98</sup> In addition, the Commission will send a copy of the *MAS Memorandum Opinion and Order*, including the Supplemental FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *MAS Memorandum Opinion and Order* and Supplemental FRFA (or summaries thereof) will also be published in the Federal Register.<sup>99</sup>

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licensees will be required to submit certain showings to indicate compliance with the Commission's Rules. See, e.g., *MAS Report and Order*, 15 FCC Rcd 11956, 11965 note 39, 11995 ¶ 95, 11997 ¶ 99.

<sup>97</sup> See *MAS Memorandum Opinion and Order* at paras. 41, 45-47.

<sup>98</sup> See 5 U.S.C. § 801(a)(1)(A).

<sup>99</sup> See 5 U.S.C. § 604(b).