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

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Federal Communications Commission
Office of Secretary

In the Matter of)
)
Amendment of the Commission's Rules to)
Establish Part 27, the Wireless)
Communications Service)

GN Docket No. 96-228

FURTHER PETITION FOR PARTIAL RECONSIDERATION

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EXECUTIVE SUMMARY

The wireless cable industry and educational users of ITFS facilities applaud the Commission for its prompt response to the concerns expressed by The Wireless Cable Association International, Inc. ("WCA") regarding potential interference from Wireless Communications Service ("WCS") licensees. With one exception discussed herein, the Commission's approach appears to strike an appropriate balance between the legitimate needs and expectations of wireless cable and distance learning systems that employ MDS and ITFS channels and the Commission's desire to promote advanced technologies that will reduce their susceptibility of those systems to WCS interference.

WCA's sole concern about the Commission's decision relates to the "sunset" on February 20, 2002 - - just five years after the initial decision to establish WCS - - of the protection afforded MDS/ITFS downconverters installed by August 20, 1998. As WCA noted in a prior *ex parte* submission to the Commission, MDS/ITFS downconverters generally have a useful life of ten years. Given that there will be hundreds of thousands of MDS/ITFS downconverters in the field and entitled to protection on February 20, 2002, the mandatory replacement of those downconverters long before the end of their useful life could impose a staggering economic burden on the wireless cable industry.

Moreover, by limiting a WCS licensee's interference protection obligation to five years, the Commission is at risk of not providing the marketplace with an adequate opportunity to devise interference solutions that are cheaper and less disruptive than requiring wireless cable operators to change out large numbers of installed downconverters at their own expense. Indeed, since WCS licensees are not even required to *build* their facilities within five years, the five year window of WCS licensee responsibility for interference may elapse before a WCS system commences operations. In such a case wireless cable and distance learning systems may be compelled to replace equipment unnecessarily if the WCS licensee commences operation at power levels that do not cause interference.

Accordingly, WCA requests that the Commission further modify its WCS rules to require a WCS licensee to bear sole financial responsibility for resolving interference to installed MDS/ITFS downconverters if the licensee receives an interference complaint prior to the earlier of five years after the WCS licensee commences service to the public, or February 20, 2007. There is ample Commission precedent for this type of timetable, and the public interest will be better served by giving MDS/ITFS and WCS licensees greater opportunities to take advantage of cheaper and less disruptive interference solutions that may arise from technological developments during the entire ten-year buildout period for WCS. By the same token, WCS licensees who are committed to making the additional investments necessary to implement their own interference solutions and provide service to the public quickly will be rewarded in the form of more limited interference protection obligations under the Commission's Rules.

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FURTHER PETITION FOR PARTIAL RECONSIDERATION

The Wireless Cable Association International, Inc. ("WCA"),^{1/} by its attorneys and pursuant to Section 1.429 of the Commission's Rules, hereby petitions the Commission to reconsider in part its April 2, 1997 *Memorandum Opinion and Order* (the "*WCS Reconsideration Order*") in this proceeding.^{2/}

I. INTRODUCTION.

At the outset, WCA applauds the Commission for its prompt response to the concerns expressed by WCA in WCA's March 10, 1997 Petition for Expedited Reconsideration regarding

^{1/} WCA is the principal trade association of the wireless cable industry. Its membership includes virtually every wireless cable operator in the United States, the licensees of many of the Multipoint Distribution Service ("MDS") stations and Instructional Television Fixed Service ("ITFS") stations that lease transmission capacity to wireless cable operators, producers of video programming and manufacturers of wireless cable transmission and reception equipment. MDS and ITFS licensees operate in the 2.1 and 2.5-2.7 GHz frequency bands. Accordingly, as discussed in greater detail herein, WCA's membership has a vital interest in the Commission's rules for the Wireless Communications Service ("WCS") insofar as they relate to interference protection from WCS licensees operating in the 2.3 GHz band.

^{2/} FCC 97-112 (rel. April 2, 1997).

potential interference from WCS to wireless cable and distance learning operations. With the one exception discussed below, the Commission's approach to WCS interference in the *WCS Reconsideration Order* appears to strike an appropriate balance between the legitimate needs and expectations of wireless cable and distance learning systems that employ MDS and ITFS channels and the Commission's desire to promote the introduction of advanced technologies into MDS and ITFS systems that will reduce their susceptibility to interference from WCS.

Specifically, by modifying its Rules to include an EIRP limitation on WCS transmissions, the Commission has established the critical technical parameters equipment manufacturers require to design MDS/ITFS downconverters that will protect MDS/ITFS reception from WCS interference.^{3/} Further, by requiring those WCS licensees who choose to operate in excess of 50 watts EIRP to bear the costs of eliminating harmful interference to MDS/ITFS licensees, the Commission has reaffirmed its historical commitment to wireless cable and ITFS service as well as its broader policy of requiring a new service provider to absorb the costs of eliminating interference to incumbent licensees in other services.^{4/} Equally significant is the fact that the Commission has taken these steps without any material degradation of its "flexible use" policy as it pertains to WCS licensees, for the 2000 watt EIRP limitation imposed on WCS operations far exceeds the power levels at which WCS is likely to operate.^{5/}

^{3/} *WCS Reconsideration Order* at ¶ 13.

^{4/} *Id.* at ¶ 14.

^{5/} *See Petition of PACS Providers Forum and Digivox Corp. for Expedited Reconsideration*, GN Docket No. 96-228, at 2 (filed Mar. 11, 1997); *Letter to William F. Caton from Paul J. Sinderbrand, Esq.*, GN Docket No. 96-228, at 1-2 (filed Mar. 28, 1997).

WCA's sole concern about the Commission's decision relates to the Commission's decision to "sunset" on February 20, 2002 -- just five years after the initial decision to establish WCS -- the protection afforded MDS/ITFS downconverters installed by August 20, 1998.^{6/} It bears emphasis that WCA does not object to the Commission's determination that all downconverters installed after August 20, 1998 should be capable of withstanding interference from WCS systems operating at up to 2000 watts EIRP. Nor does WCA suggest that WCS licensees should be required to protect existing MDS/ITFS downconverters for an unlimited period of time. To the contrary, WCA agrees that as a matter of fairness MDS/ITFS licensees eventually should be required to bear the responsibility of protecting themselves from WCS interference.

WCA believes, however, that the five-year "sunset" adopted by the Commission is too short. The *WCS Reconsideration Order* does not take into account that MDS/ITFS downconverters have a useful life of at least *ten* years, nor does it account for the possibility that WCS spectrum likely will be used in a manner that will result in interference-avoidance mechanisms far less expensive and disruptive than replacing all MDS/ITFS downconverters within five years. As a result, the Commission's five-year "sunset" will impose unnecessary economic hardship on wireless cable and distance learning systems, since the Commission in effect is requiring that a large number of MDS/ITFS downconverters be changed out long before the end of their useful life, regardless of whether the replacement of downconverters in a given market is even necessary to accommodate WCS operations. Accordingly, for the reasons set forth

^{6/} *WCS Reconsideration Order* at ¶ 15.

herein, WCA requests that the Commission further modify its WCS rules to require WCS licensees to assume sole financial responsibility for remedying interference to MDS/ITFS licensees where the complaint of interference is received by the earlier of (i) five years after the date the WCS licensee has commenced operations within its service area or (ii) February 20, 2007.

II. DISCUSSION.

As set forth in the *WCS Reconsideration Order*, a WCS licensee is required to bear financial responsibility for eliminating interference to installed MDS/ITFS downconverters only if it receives an interference complaint prior to February 20, 2002; thereafter, the financial responsibility for eliminating WCS interference shifts to the affected MDS or ITFS licensee.⁷¹

However, as WCA has stated:

the entire installed base of downconverters is not expected to be replaced anytime soon. Downconverters have proven to be extremely reliable in the field and incidents of failure are rare. As a general proposition, downconverters are anticipated to have useful lives of ten years, at a minimum. If the existing downconverters in inventory will not be protected for their anticipated useful life, they will be extremely difficult to sell at anything but distress prices. Similarly, if wireless cable operators and distance learning systems are required to replace their

⁷¹ In addition, the WCS licensee is only responsible for the costs of resolving interference if it transmits at 50 or more watts peak EIRP; the MDS/ITFS downconverter is located within a WCS transmitter's power flux density contour of -34 dBW/m²; and the MDS/ITFS customer or licensee informs the WCS licensee of the interference within one year from the initial operation of the WCS transmitter or within one year from any subsequent power increase at the WCS station. *Id.* If the WCS licensee cannot otherwise promptly eliminate interference caused to MDS/ITFS reception, then the WCS licensee must cease operations from the offending WCS facility. *Id.* In addition, before commencing operations WCS licensees are required to give affected MDS/ITFS licensees thirty days prior notice of the technical parameters of their proposed facilities. *Id.* WCA does not object to these limitations.

existing downconverters prematurely because of WCS interference, they will suffer significant financial hardship.^{8/}

As a result, the Commission's five-year "sunset" of protection for installed MDS/ITFS downconverters is problematic for several reasons. The Commission has recognized that the price of entry into the multichannel video distribution marketplace may include significant investments or "sunk costs" that cannot be redeployed to another use if their initial use becomes unprofitable.^{9/} For wireless cable operators, a substantial portion of these "sunk costs" is attributable to their installed base of MDS/ITFS downconverters, without which wireless cable subscribers cannot receive service. As of February 20, 2002, however, WCS licensees will have no obligation whatsoever to protect the installed base of MDS/ITFS downconverters, and thus wireless cable operators will have no choice but to protect themselves and their ITFS affiliates against WCS interference by "changing out" their installed downconverters at their own expense, well before the end of each downconverter's useful life. Given that there will be hundreds of thousands of MDS/ITFS downconverters in the field on February 20, 2002 that will be entitled to protection, the mandatory replacement of those downconverters long before the end of their useful life could impose a staggering economic burden on the wireless cable industry which its competitors (including incumbent cable operators, DBS providers and perhaps even WCS

^{8/} *Letter to Charles J. Iseman from Paul J. Sinderbrand, Esq.*, GN Docket No. 96-228 at 2-3 (filed March 28, 1998).

^{9/} *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, CS Docket No. 96-133, FCC 96-496 at ¶ 127 (rel. Jan. 2, 1997).

licensees offering wireless cable service) will not have to bear.^{10/}

The Commission appears to assume that over time the marketplace will play a substantial role in creating solutions for eliminating WCS interference.^{11/} Yet, by limiting a WCS licensee's interference protection obligation to five years, the Commission is at risk of not providing the marketplace with an adequate opportunity to devise interference solutions that are cheaper and less disruptive than requiring wireless cable operators to change out large numbers of installed downconverters at their own expense. In this regard, it is important to remember that the Commission has imposed *no* restrictions on the services WCS licensees may provide or on how WCS systems may be configured from market to market.^{12/} Since no one knows exactly how, when and where WCS systems will be deployed, WCA submits that it is premature at this time to assume that the most effective way to resolve the WCS interference problem is to simply require MDS and ITFS licensees to change out all of their installed downconverters after the five-year period is over. Indeed, because WCS systems may be designed to operate at power levels

^{10/} Compare, e.g., 47 C.F.R. § 76.921(c) (giving certain incumbent cable operators a ten-year period within which to come into compliance with statutory "tier buy-through" requirements).

^{11/} See *WCS Reconsideration Order* at ¶ 15 ("We expect the WCS and MDS/ITFS licensees to coordinate voluntarily and in good faith to avoid interference problems and to allow the greatest operational flexibility in each other's operations.").

^{12/} See *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service*, GN Docket No. 96-228, FCC 97-50 at ¶ 25 (rel. Feb. 19, 1997) ["We conclude that under the totality of the circumstances presented, the 2305-2320 and 2345-2360 MHz bands will be allocated on a primary basis for fixed, mobile, radio telephone, and broadcasting-satellite (sound) services without further designations. . . WCS licensees themselves will determine the specific services they will provide within their assigned spectrum and geographic areas."].

that do not cause interference to MDS/ITFS reception, it may well be that downconverters need not be replaced in a given market before the end of their useful life. On this point, it should be noted that WCS licensees are not even required to *build* their facilities within five years; rather, they are only required to provide “substantial service” to their service areas within *ten* years.^{13/} Thus, the five-year window may elapse *before* a WCS system commences operations. In such a case wireless cable and distance learning systems may be compelled to replace equipment unnecessarily, since after the five-year window closes the WCS licensee may commence operations at power levels that do not cause interference.

WCA recognizes, however, that ultimately the Commission must weigh the needs of MDS/ITFS licensees against the need to require WCS licensees to protect the installed base of MDS/ITFS downconverters only for a reasonable period of time. Accordingly, WCA proposes a compromise solution which it believes will achieve the proper balance between these two competing concerns. Specifically, WCA requests that the Commission further modify its WCS rules to require a WCS licensee to bear sole financial responsibility for resolving interference to installed MDS/ITFS downconverters if the licensee receives an interference complaint prior to the earlier of five years after the WCS licensee commences service to the public, or February 20, 2007.

There is ample precedent for the Commission to protect downconverters for their entire useful life. When the Commission adopted ITFS interference protection rules in the mid-1980s, it provided special protection for ITFS receive sites constructed prior to May 26, 1983 in

^{13/} *WCS Reconsideration Order* at ¶ 111.

recognition of the inferior quality of their downconverters. ITFS facilities are generally provided with a 0 dB desired to undesired adjacent-channel interference protection ratio at each registered receive site. However, receive sites built before May 26, 1983 are provided with an additional 10 dB protection.^{14/} These older ITFS receive sites are entitled to the additional protection until such time as the licensee voluntarily replaces the grandfathered equipment or an applicant for new or modified facilities in the vicinity offers to upgrade the grandfathered equipment.^{15/} Just last summer, the Commission confirmed that those pre-May 26, 1983 receive sites still are entitled to the additional protection.^{16/}

^{14/} See *Amendment of Parts 21, 74 and 94 of the Commission's Rules and Regulations with Regard to the Technical Requirements Applicable to the Multipoint Distribution Service, the Instructional Television Fixed Service and the Private Operational-Fixed Microwave Service (OFS)*, 98 F.C.C.2d 68, 82-83 (1984).

^{15/} See *Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands*, 5 FCC Rcd 6410, 6414 (1990).

^{16/} *Request For Declaratory Ruling on the Use of Digital Modulation by Multipoint Distribution Service and Instructional Television Fixed Service Stations*, DA 95-1854, at 13 n. 41 (rel. July 10, 1996). In addition, when the Commission has modified its rules but afforded manufacturers an opportunity to market noncompliant devices, the Commission has not imposed any restrictions on the subsequent use of such devices. See, e.g. *Amendment of Part 90 of the Commission's Rules to Restrict the Use of Radio Transmitters with External Frequency Controls*, 2 FCC Rcd 7221, 7223 (1987)[permitting manufacturing of equipment that did not comply with new rule for an additional 60 days, permitting marketing of such equipment for an additional year thereafter and imposing no restriction on the subsequent use of such equipment]; *Extension of the Cut-Off Date For Sale of Low Power 27 MHz Walkie-Talkies Certificated Under Part 15 of FCC Rules*, 67 F.C.C.2d 1405 (1978)[affording manufacturers one year to manufacture non-compliant devices, and over two years thereafter to market such devices without any restriction on future use of devices]; *Petition to Temporarily Waive the CB Receiver Chassis Radiation Requirement and Petition to Give Expedited Consideration to an Application for CB Equipment Authorization Filed after November 1, 1976*, 61 F.C.C.2d 752, 756 (1976)[FCC permits the sale and subsequent unrestricted use of certain CB radios in inventory at the time of new rule changes]; *Amendment of Part 15 of the Commission's Rules to Provide for the Operation of Radio Door Controls*, 30

Furthermore, by establishing a ten-year maximum period for protection of installed MDS/ITFS downconverters against WCS interference, the Commission will also give MDS/ITFS and WCS licensees greater opportunities to take advantage of cheaper and less disruptive interference solutions that may arise from technological developments during the entire ten-year buildout period for WCS. WCA thus submits that the net effect of a ten-year period as opposed to the Commission's original five-year period will be that industrywide costs of eliminating WCS interference to wireless cable and distance learning operations will decline considerably, to the benefit of wireless cable operators, ITFS licensees, WCS licensees and subscribers alike.

By the same token, WCS licensees who are committed to making the additional investments necessary to implement their own interference solutions and to provide service to the public quickly will be rewarded in the form of more limited interference protection obligations under the Commission's Rules. For example, under WCA's proposal a WCS licensee that addresses the interference problem immediately and commences operations on January 1, 1998 would be responsible for resolving interference complaints received only until January 1, 2003, not February 20, 2007. Conversely, WCS licensees who are not committed to making these investments and who otherwise delay service to the public quite correctly will receive no such benefit. It does not serve the public interest to require MDS/ITFS licensees to bear the significant financial burden of changing out their installed base of downconverters before the end of their useful life for the benefit of WCS licensees who are not providing service.

F.C.C.2d 584, 586 (1971)[affording manufacturers of remote door controls additional time to sell inventory of non-complying equipment, without imposition of any restriction on the use of that equipment].

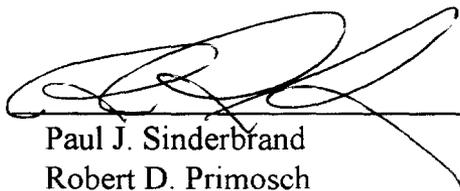
III. CONCLUSION.

WCA reiterates that the Commission's handling of the WCS interference problem by and large is a successful accommodation of the Commission's "flexible use" policy for WCS spectrum and the interference protection requirements of MDS/ITFS licensees. In virtually every respect, the Commission's decision fairly takes into account the potentially devastating effects of WCS interference and provides a workable solution for eliminating that interference in a manner that does not unduly burden the wireless cable industry, distance learning providers or the upstart WCS service. Significantly, the Commission reached its decision after working with the wireless cable industry to obtain a better factual understanding of the technical and economic issues associated with WCS interference to wireless cable and ITFS operations.^{17/} In that cooperative spirit, WCA now respectfully asks the Commission to further reconsider its decision and adopt the compromise timetable described above to fully account for the ten-year useful life of installed MDS/ITFS downconverters and to otherwise avoid imposing unnecessary economic burdens on wireless cable operators and distance learning providers.

^{17/} See *WCS Reconsideration Order* at ¶ 5 (“[B]ased on a better understanding of the potential for WCS operations to interfere with MDS/ITFS reception, we are specifying limits on WCS operating power and are requiring that, for a limited time, WCS licensees assume responsibility under certain circumstances for interference they may cause to MDS/ITFS operations.”).

WHEREFORE, The Wireless Cable Association International, Inc. requests that the Commission further modify its Rules adopted in the *WCS Reconsideration Order* as requested above.

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April 14, 1997

CERTIFICATE OF SERVICE

I, Robert D. Primosch, hereby certify that on this 14th day of April, 1997, I caused copies of the foregoing Petition for Further Reconsideration to be served, by first class postage prepaid U.S. Mail, on the following:

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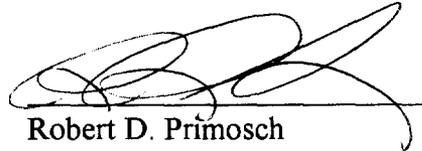
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