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October 9, 2024

VIA E-MAIL(Jessica.rosenworcel@fcc.gov)
Jessica Rosenworcel, Chairwoman
Federal Communications Commission
45 L Street, N.E.
Washington, DC 20554

Re: Ongoing Harmful Interference from Digital Television Stations[1]

Dear Chairwoman Rosenworcel:

For almost a half-century, private land mobile radio ("PLMR") licensees and television broadcasters enjoyed an essentially interference-free sharing arrangement involving a small number of 470-512 MHz ("T-Band") television channels in eleven markets.[2] There is no indication during that period that land mobile systems ever interfered with television reception and only a handful of instances of interference were identified to land mobile operations caused by sporadic atmospheric ducting from broadcast stations.[3]

That highly successful example of spectrum sharing was irrevocably altered after 2017 as a result of the Federal Communications Commission ("FCC") digital television ("DTV") repacking initiative. As part of that process, the FCC adopted Rule Section 73.623(e) that established a reduced minimum separation between co-channel and adjacent channel full-power DTV stations and PLMR T-Band markets. This closer spacing presumably was adopted to create more opportunities for DTV channel assignments in the smaller TV allocation. While those closer distances have proven adequate in several areas, they have resulted in harmful interference, as defined in FCC Rule Section 2.1(c), in the markets identified on Attachment A with devastating effect on PLMR systems. In some, the interference is so intractable that T-Band spectrum is entirely unusable by PLMR systems. In others, the frequency and degree of interference

[1] *See* Attachment A.
[2] Amendment of Parts 2, 89, 91, and 93, First Report and Order, Docket No. 18261, 23 FCC 2d 325 (1970).
[3] The FCC granted a waiver to Mercer County, NJ in 2015 of the then applicable T-Band licensing freeze, allowing it to exchange channels that were receiving interference from a Connecticut television station with channels for which it had received concurrence from another public safety licensee. See, e.g., WQCW645.

has created such service unreliability that PLMR users have abandoned T-Band for alternative spectrum or have designated T-Band as their channels of last resort.

The Enterprise Wireless Alliance ("EWA") is a member of the National Wireless Communications Council ("NWCC," previously the Land Mobile Communications Council) that first brought this matter to the FCC's attention in an August 28, 2020, letter. That letter explained the situation as follows:

> The systems have not been immune from interference in the past, including seasonal ducting problems from more distant co-channel television stations. That type of intermittent interference is troublesome but temporary and is a reality of congested airwaves. This situation is different. Rather than having a problem on a few days during periods when the seasons change, this interference is so strong that it takes the PLMR systems off the air and is occurring for many hours several days a week or even multiple consecutive days. It is harmful interference as defined by FCC Rule Section 15.3:
>
> [a]ny emission, radiation or induction that endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communications service.

After consulting with FCC staff, at the FCC's suggestion, the NWCC created a DTV Resolution Task Force and presented its recommendations to the FCC in a letter dated November 25, 2020. The NWCC sent a follow-up letter on July 6, 2021, reminding the FCC that this matter remained unresolved. Copies of these NWCC letters are attached for your convenience. Neither the NWCC nor any of its members such as EWA has received a response to any of this correspondence, while interference to public safety and business enterprise systems continues unabated in the markets on Attachment A.[4]

EWA recognizes that the DTV stations involved are operating in accordance with the FCC rules and with the terms of their authorizations. The PLMR stations are fully compliant as well. Historically, the FCC has required later-authorized systems to resolve interference with earlier-granted licensees.[5] It has not done so in this instance, and the efforts of the PLMR licensees to induce voluntary interference protection from the identified DTV stations have not proven effective. The result is the loss of allocated PLMR spectrum in New York, Miami, Chicago, Houston, and Dallas, five of the major,

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[4] In a few instances, interference from full-power television stations was resolved without FCC involvement.

[5] *See, e.g.*, Midnight Sun Broadcasting Company, 11 FCC 1119 (1947); Western Slope Communications, Ltd., Mimeo No. 4431 (released May 31, 1983); Broadcast Corporation of Georgia (WVEU-TV) 96 FCC 2d 901 (1984); WKLX, Inc., 6 FCC Rcd 225 (1991).

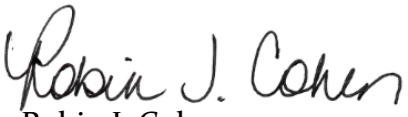
most spectrum-congested markets in the nation due to interference from DTV stations whose principal communities of service are well outside those markets.[6]

To address this situation, EWA asks the FCC to convene its own task force, a group that should include representatives of the DTV and PLMR T-Band stations involved, to investigate solutions that allow both types of licensees to have appropriate use of the spectrum assigned to them. There is not likely to be a one-size-fits-all solution, but EWA and its affected members have been and remain prepared to work cooperatively with the FCC and with the DTV licensees to address these situations.

We look forward to the FCC's assistance in working with the affected parties to resolve this harmful interference to PLMR operations on T-Band spectrum.

Sincerely,

ENTERPRISE WIRELESS ALLIANCE



Robin J. Cohen
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Attachments

cc via e-mail:
Commissioner Brendan Carr
Commissioner Geoffrey Starks
Commissioner Nathan Simington
Commissioner Anna M. Gomez
Joel Taubenblatt, Bureau Chief, WTB
Roger Noel, Chief, Mobility Division, WTB
Debra Jordan, Bureau Chief, PSHSB
David Furth, Deputy Chief, PSHSB
Holly Saurer, Bureau Chief, MB
Loyaan A. Egal, Bureau Chief, EB
Ira Keltz, Acting Chief Engineer, OET
Robert Weller, VP Spectrum Policy, NAB

[6] For example, KBTX-TV in Bryan, Texas, is intended to serve viewers in the Brazos Valley area, not viewers in Dallas,

ATTACHMENT A

Chicago:

WGBA-Channel 14: SCRIPPS BROADCASTING HOLDINGS LLC, Green Bay, WI
WLAJ-Channel 14: WLAJ-TV LLC (Lansing, MI)
KFXB-Channel 14: CHRISTIAN TELEVISION NETWORK OF IOWA, INC. (Dubuque, IA)

Dallas:

KBTX-Channel 16: GRAY TELEVISION LICENSEE, LLC, Bryan, TX
KHCE-Channel 16: SAN ANTONIO COMMUNITY EDUCATIONAL TV, INC.
KSHV-Channel 16: WHITE KNIGHT BROADCASTING OF SHREVEPORT LICENSE CORPORATION, Shreveport, LA
Note - Interference from KBTX masks the interference from KSHV

Houston:

KNCT-Channel 17: GRAY TELEVISION LICENSEE, LLC (Belton, TX)
KNVO-Channel 17: ENTRAVISION HOLDINGS, LLC (McAllen, TX)
KCRP-LP-Channel 17 (Corpus Christi, TX)

Miami:

WOPX-TV-Channel 14: ION MEDIA ORLANDO LICENSE, INC. (Melbourne, FL)

New York:

WFNY-Channel 16: CMS BROADCASTING COMPANY (Gloversville, NY)

LAND MOBILE COMMUNICATIONS COUNCIL

August 28, 2020

Michelle M. Carey, Chief, Media Bureau
Lisa M. Fowlkes, Chief, Public Safety and Homeland Security Bureau
Rosemary Harold, Chief, Enforcement Bureau
Donald Stockdale, Chief, Wireless Telecommunications Bureau
Ron Repasi, Acting Chief Engineer
Federal Communications Commission
445 12th Street, S. W.
Washington, D.C. 20554

Re: Request for Relief from Interference from Digital Television Stations

Dear FCC Bureau Chiefs:

The Land Mobile Communications Council ("LMCC"), in accordance with Section 1.41 of the Federal Communications Commission ("FCC") rules, urgently requests expedited FCC action to address multiple instances of harmful interference from newly authorized digital television ("DTV") stations to long-standing Part 90 private land mobile radio (PLMR") systems. This interference has rendered affected PLMR facilities entirely unusable in certain markets, resulting in hundreds of thousands of dollars of lost revenue as customers of commercial systems are forced to search for alternative communication options and incurred expenses as licensees have sought remedial action by the broadcasters and/or acquired other spectrum to which their operations could be moved. The interference with what had been reliable communications endangers the safety of employees, disrupts operations at affected facilities, and poses a major threat to public safety in certain instances. The urgency of the problems demand FCC action to enforce those regulations and policies as promptly as possible and to avoid the creation of similar problems in the future.

The LMCC is a non-profit association of organizations representing virtually all users of land mobile radio systems.[1] It is bringing this issue to the attention of the FCC

[1] LMCC member organizations include the American Association of State Highway and Transportation Officials; American Automobile Association; American Petroleum Institute; Association of American Railroads; Association of Public-Safety Communications Officials-International; Aviation Spectrum Resources; Enterprise Wireless Alliance; Forest Industries Telecommunications; Forestry-Conservation

both because the problem is wide-spread among a number of licensee members of the LMCC organizations[2] and because requests for action from individual licensees, for the most part, have not resolved the interference in a timely fashion, or in some cases, at all.

Yet these situations require rapid resolution. The fact patterns are entirely consistent. PLMR licensees begin experiencing interference once a new DTV station repacked to a channel between 14-20 begins operating, or, in some cases, testing. This is not a competitive situation in which there might be a business motivation for a licensee to lodge an interference complaint against a newcomer. PLMR licensees have no reason to seek FCC assistance in resolving the problem other than the need to maintain their own operations. There should be a process in place that allows these matters to be fast-tracked given existing FCC rules and policies.

As detailed in Attachment A, there are two categories of interference situations, both of which involve DTV stations that have been moved to Channels 14-20. Some of the DTV stations are full-power while others are low-power and, thus, are subject to different rules regarding their interference-correction responsibilities.

1) Co-channel interference from DTV stations to PLMR systems operating on spectrum in the 470-512 MHz band ("T-Band") that was allocated for PLMR use in certain major markets more than fifty years ago ("T-Band Interference"). Because these are co-channel facilities, filtering is not a solution.

2) Adjacent channel interference from DTV stations on Channel 14 (470-476 MHz) to PLMR licensees operating in the UHF band below 470 MHz ("Ch 14 Interference"). As discussed below, appropriate filtering has been successful in certain situations.

In New York and Chicago, there is both co-channel interference from the Channel 14 DTV station to Ch 14 T-Band licensees and adjacent channel interference to UHF MHz PLMR licensees.

T-Band Interference

Full-power DTV Stations: Rule Section 73.623€ establishes minimum distance separations between full-power DTV stations and PLMR T-Band markets. A DTV transmitter must be 250 km/155 miles from the city center of a co-channel land mobile

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Communications Association; Government Wireless Technology & Communications Association; International Association of Fire Chiefs; International Municipal Signal Association; MRFAC, Inc.; Telecommunications Industry Association; The Monitoring Association; Utilities Technology Council; and, Wireless Infrastructure Association.

[2] The licensees identified in Attachment A are representative of those experiencing interference in each of those situations. Many more PLMR systems are affected by the interfering DTV stations identified.

operation and 176 km/109 miles from an adjacent channel market. Those distances have proven inadequate for providing the intended interference protection in Dallas/Houston, Texas, and Los Angeles/San Francisco, California. In those markets, PLMR systems have been entirely desensed and rendered inoperable by DTV stations that meet (often by the narrowest of margins) the minimum distance separation.

These PLMR facilities have been in operation for decades and provide essential fleet dispatch communications for a broad range of business and governmental users, including hospitals, school buses, roadside assistance, highway maintenance, refining, petrochemical production, high voltage electrical repair, and firefighting.

The systems have not been immune from interference in the past, including seasonal ducting problems from more distant co-channel television stations. That type of intermittent interference is troublesome but temporary and is a reality of congested airwaves. This situation is different. Rather than having a problem on a few days during periods when the seasons change, this interference is so strong that it takes the PLMR systems off the air and is occurring for many hours several days a week or even multiple consecutive days. It is harmful interference as defined by FCC Rule Section 15.3:

> [a]ny emission, radiation or induction that endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communications service.

The LMCC assumes that the DTV stations are operating in accordance with FCC rules – as are the PLMR stations. In such cases, the FCC has relied on its long-standing "newcomer" policy pursuant to which new licensees are responsible for resolving interference caused by their operations even if all parties are operating in accordance with the rules and the terms of their authorizations.[3] In this instance, it is vital that the newcomer DTV stations assume this obligation because there are no anti-interference solutions available to the PLMR licensees. The interference has been measured regularly a7 -70 dBm at certain PLMR sites and at -86 dBm even at receive antennas on 20' above ground level. The PLMR systems cannot be reconfigured to reject the overpowering transmissions from too proximate DTV stations, nor should they be required to attempt to do so in accordance with established FCC policy that has been relied upon in multiple decisions over many decades. The newcomer DTV stations must eliminate the interference they are causing and assume full financial responsibility for doing so.

[3] See, e.g., Midnight Sun Broadcasting Company, 11 FCC 1119 (1947); Western Slope Communications, Ltd., Mimeo No. 4431 (released May 31, 1983); Broadcast Corporation of Georgia (WVEU-TV) 96 FCC 2d 901 (1984); WKLX, Inc., 6 FCC Rcd 225 (1991).

Low-Power DTV Stations: The FCC rules could not be more explicit with regard to the rights of these stations vis-à-vis land mobile systems. Rule Section 74.703(e) states the following:

> Low power TV and TV translator stations are being authorized on a secondary basis to existing land mobile uses and must correct whatever interference they cause to land mobile stations or cease operations.

There should be no hesitation on the part of the FCC in directing low-power stations to fix the interference they cause promptly or take their transmitters off the air until they can do so.

Channel 14 Interference

Full-Power DTV Stations: The FCC rules also are clear about UHF PLMR protection rights when interference comes from Channel 14 stations. Following multiple instances of interference from Channel 14 stations to adjacent PLMR UHF operations and from Channel 69 TV stations to adjacent PLMR 800 MHz operations in the 1980s, the FCC adopted Rule Section 73.687(e), subsection (ii) that reads in pertinent part:

> A TV permittee must take steps before construction to identify potential interference to normal land mobile operations that could be caused by TV emissions outside the authorized channel, land mobile receiver desensitization or intermodulation. It must install filters and take other precautions as necessary, and submit evidence that no interference is being caused before it will be permitted to transmit programming on the new facilities …

A number of new permittees have been diligent both in identifying potentially affected PLMR systems and, more important, in implementing the necessary filtering to avoid causing interference.[4] Their success makes clear that those facilities can co-exist when appropriate interference mitigation measures are taken by the DTV station. The FCC rules give the agency full authority to take prompt, decisive action when permittees fail to comply with this obligation and the LMCC urges it to do so.

[4] For example, KDTS-LD in San Francisco prepared an extensive land mobile impact study as part of its modification application, and now that the station is in a testing phase, they are in constant contact with potentially impacted licensees.

Low-Power DTV Stations: Low-power DTV stations are subject to Rule Section 74.703(e) cited above whether the interference is to co-channel T-Band PLMR systems or adjacent PLMR UHF systems.

The LMCC is not requesting the Commission to take action which is in any way novel. Rather, the LMCC is requesting that the Commission enforce existing Commission Rules without delay. Some of the instances of harmful interference reported in the Attachment have been known by the Commission for over a year without resolution. The number of PLMR systems affected and the extent of the interference requires the LMCC to request a meeting as soon as possible with appropriate FCC personnel. The purpose would be to develop remedial action plans for ongoing interference situations and to discuss how to prevent future occurrences.

Sincerely,

Klaus Bender
President

Mark E. Crosby
Secretary/Treasurer

Attachment

cc: David Furth, PSHSB
Roger Noel, WTB
Ira Keltz, OET
Jeremy Marcus, EB
Robert Weller, NAB

LAND MOBILE COMMUNICATIONS COUNCIL

November 25, 2020

Mr. Thomas Reed
Special Attorney Advisor
Wireless Telecommunications Bureau
Federal Communications Commission
45 L Street, N.E.
Washington, D.C. 20554

Re: DTV Interference Resolution

Dear Mr. Reed:

On behalf of the private land mobile incumbents who are experiencing harmful interference from repacked and new DTV stations, the LMCC appreciated the opportunity to meet on October 22 with FCC personnel representing the various bureaus that have a potential role in resolving these situations. Subsequently, the LMCC organized a "DTV Resolution" Task Force whose participating organizations, at the moment, include:

- American Association of State Highway and Transportation Officials;
- Association of Public-Safety Communications Officials;
- Enterprise Wireless Alliance;
- Government Wireless Technology & Communications Association;
- Forest Industries Telecommunications;
- MRFAC, Inc.;
- Society of Broadcast Engineers; and
- Utilities Telecom Council

These industry associations represent the numerous public safety, critical infrastructure, business enterprises and private carrier incumbent licensees who are experiencing harmful interference from DTV stations, as well as the Society of Broadcast Engineers ("SBE"), which is providing technical assistance. The Task Force convened on November 4 and agreed to pursue the following critical next steps and to seek FCC intervention in those instances that may be resolved simply through FCC rule enforcement.

Interferer Verification – During the October 22 meeting, the FCC noted that a certain number of DTV stations were not recently relocated, and thus not considered "repacked."

The Task Force has updated the attached "Summary of TV Interference into Land Mobile Systems ("Summary")" to specifically identify those DTV stations that were in fact "repacked".[1] If there are other analyses or considerations the Task Force should incorporate in the Summary, please advise so that we may enhance the opportunities to identify collaborative interference solutions.

Channel 14 Adjacent Channel Interference – Interference caused to land mobile incumbent systems operating in the Part 90 460-470 MHz band immediately adjacent to Channel 14 creates the optimum resolution opportunity as the solution is found in FCC Rule Section 73.687(e)(4)(ii). However, not all repacked Channel 14 station operators appear to appreciate their obligation to take steps prior to construction to identify potential interference to land mobile operations, to install filters and take other precautions as necessary to ensure that no interference is caused. To the best of the Task Force's knowledge, in every instance where a Channel 14 TV station has added proper filters, the interference to PLMRS incumbents was resolved, albeit generally after the fact. *We request that the FCC contact the Channel 14 licensees in Northern California (KDTS, KQTA, KMMW, KSAO and KMCE) and remind them of their obligation to take appropriate measures to comply with Section 73.687(e)(4)(ii).*[2] We also suggest that any new Channel 14 licensee, including low-power stations, be reminded of this obligation, preferably by direct communication from the FCC. Please advise if the request for assistance requires a more formal approach on the part of the Task Force, and what additional information may facilitate the FCC's intervention, for example the results of any efforts by incumbent licensees to seek a resolution directly with the interfering Channel 14 station.

Low-Power Interference – There are multiple cases of Low Power and Translator television stations which have been causing interference to T-Band PLMR systems, including Public Safety. The Commission is aware of the long-standing interference being caused by KHSC-LD, Fresno, California to the Los Angeles County Sheriff's Department, as well as non-public safety PLMR systems in the San Francisco area. However, this is not a singular example. In some cases, the TV stations were placed on these channels as part of repacking. In some cases, the TV stations were permitted on these channels due to inadvertent errors. For example, in the case of KHSC-LD, Channel 16 was available

[1] KHCE, Channel 16 in San Antonio, was identified because it has caused intermittent "atmospheric" interference to T-Band incumbents in Houston for years. Unlike the interference now being experienced from KBTX and KSHV, this was sufficiently sporadic that the incumbents have tolerated it. WYBN, Channel 14 in Albany, was not repacked but modified its facilities in such a way that it caused interference that had not existed previously. The low-power Channel 14 stations in Northern California are new.

[2] Station WYBN in Albany, New York, after a substantial effort on the part of the affected land mobile licensee, vacated its use of Channel 14 thus eliminating the harmful interference after a thirteen-month effort. This instance was particularly frustrating given that WYBN was a low-power station that, in accordance with FCC Rule Section 74.703(e), operated on a secondary basis to existing land mobile uses and had an obligation to correct the interference or cease operations.

because the prior TV station needed to move as it was causing interference to the Los Angeles County Sheriff's Department.[3] Thus, by permitting the KHSC-LD relocation, the interference reoccurred. Similarly, the Commission permitted the assignment of TV Channel 15 to Tijuana, Mexico and Bakersfield, California without consideration of the transmitter sites which Los Angeles County had previously licensed.

The Commission's Rules and Policies with regard to such TV stations are clear; they are secondary to land mobile operations. In these cases, the Commission must take swift action. However, documented interference has continued for over a year in more than one case.

Co-Channel Interference – The Task Force understands that the more difficult cases to resolve are those involving interference to T-Band systems from full-power DTV stations operating on a co-channel basis. Incidences of this form of interference have been identified by the Task Force in Dallas, Houston, Los Angeles, San Francisco, New York, Chicago, and Miami.

We appreciate that it may be difficult for the FCC to implement its long-standing policy that the last licensee in is responsible for resolving interference caused by their operations, the channels having been assigned by the FCC in accordance with the mileage separations in FCC Rule Section 73.623(e). We also understand that the DTV broadcast stations are not interested in either modifying their systems to mitigate instances of co-channel interference or funding incumbent system modifications that would address the problem if replacement channels were available.

Task Force Recommendations - Nevertheless, a failure to enforce the "last-in" policy in these cases could have repercussions for communications policy far beyond DTV interference to PLMRS. Without prejudice to our position in this respect, but in deference to the Commission's request that the Task Force provide alternative suggestions, the Task Force offers the following approaches that individually or collectively may provide meaningful solutions.

- Repacking DTV Stations - Auction 1000 was conducted pursuant to Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act)[4] and required the "repacking" or reorganizing of broadcast television bands. The Spectrum Act requires "all reasonable efforts to preserve [as of the date of the enactment of this

[3] Digital Television Broadcast Stations (Fresno, California), 19 FCC Rcd, 21891 (Chief, Video Division), released November 5, 2004.

[4] Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §§ 6402 (codified at 47 U.S.C. § 309(j)(8)(G)), 6403 (codified at 47 U.S.C. § 1452), 126 Stat. 156 (2012) (the Spectrum Act).

Act] the coverage area and population served of each broadcast television licensee, as determined using the methodology described in OET Bulletin 69."[5]

In addition to the data required to carry out the statutory preservation mandate of the Spectrum Act [§ 6403(b)(2)], FCC Rule Section 73.623(e) requires broadcast channel assignments to protect T-Band incumbents. Unfortunately, despite the Commission's best efforts, co-channel land mobile radio interference has occurred in a number of repack situations. The assignment of a repack channel that is compromised by actual interference to incumbent land mobile licensees entitled to protection should be changed by relocating the television station to a different channel. Unless the station sought that channel itself, as a variation from the repack channel assignment, the reassignment should be paid for from the Auction 1000 net revenues.

The Commission accommodated, during the repack process, changes in the channel assignment if a television broadcast station was dissatisfied with its new channel assignment due to terrain losses. While the Spectrum Act precludes more than one repack (and more than one reverse auction), a correction in a repack channel assignment is part of the original process and remediates interference created by the initial assignment.

Allowing further reassignments to eliminate interference, with expenses reimbursed, would be consistent with FCC policy of assigning *comparable replacement facilities* to displaced licensees following a reallocation or auction process across many different radio services. See, e.g. 47 C.F.R. § 90.699(d) (replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to existing 800 MHz system); 47 C.F.R. § 101.89(d) and § 101.91(b) (relocation of FS licensees to comparable facilities by FSS licensees); *Second Report and Order and Second Memorandum Opinion and Order*, ET Docket 95-18, 15 FCC Rcd 12315 (2000); Redesignation of the 17.7-19.7 GHz Frequency Band, *First Order on Reconsideration*, ET Docket 98-172, 16 FCC Rcd 19808 (2001). The Commission's *Emerging Technologies* principles, by which new entrants are obligated to provide incumbents with comparable facilities in order to obtain earlier access to the spectrum was the genesis of the policy.[6]

- DTV Station Modifications – Task Force representatives will, on an individual incident basis, in cooperation with the interfering station, explore DTV station

[5] *Id.*, §§ 6403(b)(1)(B), (b)(2).

[6] *See,* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, *Memorandum Opinion and Order and Further Notice of Proposed Rule Making, 16 FCC Rcd 16043 at 16061, ¶ 40. (2001).*

technical system reconfigurations that may mitigate the co-channel interference to incumbent PLMRS operations. We are aware that the likelihood of a technical solution is remote given the disparate power levels, capital necessary to fund system modifications, and potentially the lack of interest by the DTV stations to consider solutions other than a channel reassignment if an alternative channel is available. However, as an integral part of this approach, we ask that the Commission consider issuing a formal letter of inquiry to the TV licensee seeking data and documents relevant to its efforts to resolve the interference.

- Replacement Spectrum – T-Band channels generally are assigned on an exclusive basis and function as control channels that are critical to the operation of advanced digital trunked systems, whether in T-Band-only systems or, commonly, in systems utilizing both T-Band and 460-470 MHz channels. The 460-470 MHz bands are saturated in the areas experiencing co-channel TV interference with most channels operating on a shared basis. Replacing a T-Band channel with a shared 460-470 MHz channel would not provide the same functionality and could not be considered comparable. While 800 MHz channels generally are exclusive, it is unlikely that there are enough in any of the affected markets to replace all T-Band channels receiving interference. Also, it is not possible to add 800 MHz channels to a system that also uses 460-470 MHz or T-Band spectrum. Some affected business enterprises and private carrier operators have added 460-470 MHz shared channels at their own expense to maintain some measure of system reliability out of employee and public safety concerns, and to stem their loss of customers.

  Identifying alternative sources of exclusive channels is a near impossible challenge. As a potential solution that would appear not to jeopardize broadcast operations in any way, the Task Force will be preparing a formal request for the FCC to approve the use of available UHF remote pickup broadcast channels, licensed under FCC Rule Section 74.402 as replacements for Part 90 T-band channels in those urban areas where comparable replacement spectrum is unavailable.

  To be clear, the Task Force does not anticipate the need for affected PLMR incumbents to access, possibly through the waiver process, a substantial number of remote pickup broadcast channels. Their trunked systems typically rely on a few exclusive use channels for control purposes coupled with shared channels. The PLMR incumbents have significant investments in TDMA and FDMA digital technology, which maximizes the efficient use of 12.5 kHz and 25 kHz channel bandwidths, creating multiple voice/data paths. A single remote pickup broadcast channel can effectively provide up to four (4) communication paths, and address many of the more egregious instances of harmful interference.

- Must Carry Policies – Current FCC rules require that broadcasters maintain certain operations in order to have their programming carried over local cable systems.[7] Some TV stations maintain their over-the-air operations strictly to retain must carry status. As a potential additional solution, the Task Force will be preparing a formal request for the FCC to permit affected DTV stations to operate at reduced power levels to mitigate co-channel interference to T-Band incumbents (or interference from Channel 14 to adjacent channel 460-470 MHz systems) while maintaining their must carry rights. If the FCC does not wish to consider this solution in these unique circumstances, it would be helpful to know in advance.

The Task Force also strongly recommends that the FCC not assign Channel 14 to any new full-power or low-power television stations. If future assignments are made, they should be conditioned on the installation of filtering sufficient to prevent interference to adjacent PLMR systems prior to any testing and not as an after-the-fact cure.

We look forward to hearing from you in response to these recommendations and would welcome other solutions the FCC may suggest. We are available to meet at the FCC's convenience, please contact the undersigned if you have any questions or comments in the interim.

Sincerely,

Klaus Bender
President

Mark Crosby
Secretary/Treasurer

Attachment

cc: David Furth, PSHSB
Roger Noel, WTB
Ira Keltz, OET
Jeremy Marcus, EB
Robert Weller, NAB

[7] See 47 CFR 76.55.

LAND MOBILE COMMUNICATIONS COUNCIL

July 6, 2021

Jessica Rosenworcel, Acting Chairwoman
Federal Communications Commission
45 L Street, N.E.
Washington, DC 20554

Re: Immediate Request for Relief from Interference
from Digital Television Stations

Dear Acting Chairwoman Rosenworcel:

The Land Mobile Communications Council (LMCC), a non-profit organization representing virtually all public safety, business enterprise, and commercial providers using land mobile radio systems,[1] respectfully requests the assistance of your office in addressing a critical issue brought to the attention of the Federal Communications Commission (FCC) more than ten months ago that remains unaddressed and unresolved. The matter is urgent as it involves interference to numerous land mobile systems around the nation.

The LMCC sent the attached letter to the identified FCC offices on August 28, 2020. That letter detailed multiple instances of interference to land mobile systems from new full-power and low-power digital television stations. The situations described included interference from channel 14 transmitters to land mobile systems operating on immediately adjacent UHF Part 90 spectrum, as well as both co-channel and adjacent channel interference from digital television stations to land mobile systems operating on T-Band (470-512 MHz) Part 90 spectrum. LMCC representatives had a follow-up video

[1] LMCC member organizations include the American Association of State Highway and Transportation Officials; American Automobile Association; American Petroleum Institute; Association of American Railroads; Association of Public-Safety Communications Officials-International; Aviation Spectrum Resources; Enterprise Wireless Alliance; Forest Industries Telecommunications; Forestry-Conservation Communications Association; Government Wireless Technology & Communications Association; International Association of Fire Chiefs; International Municipal Signal Association; MRFAC, Inc.; Telecommunications Industry Association; The Monitoring Association; Utilities Technology Council; and, Wireless Infrastructure Association.

conference with representatives from the FCC on October 22, 2020, to discuss these situations and to seek guidance from the FCC as to their resolution. As recommended by the FCC, the LMCC undertook an effort to identify potential solutions to the problems. It created a DTV Resolution Task Force and presented its recommendations to the FCC along with additional information about the ongoing interference situations in the attached November 25, 2020, letter.

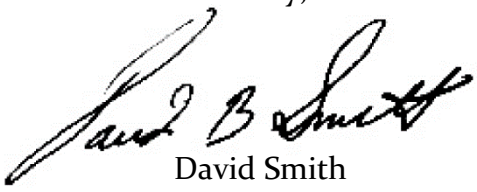
We have heard nothing further. A number of the interference problems continue unabated. In some instances, the interference has been so unremitting that licensees have had no choice but to relocate to other spectrum at their own considerable expense. But even this "solution" is possible only when suitable replacement spectrum is available for purchase, which is not always the case, particularly in T-Band markets where all spectrum is used intensively.

The LMCC recognizes that all FCC Bureaus and Offices have many important matters with which they must contend. However, the LMCC is requesting the attention of your office, as it is confident that the FCC under your leadership will want to address this matter.

The LMCC remains committed to working with the FCC in addressing these matters. One important first step would be an immediate stop to all new channel 14 assignments, as they are an egregious, well-known source of interference to land mobile systems around the country. We also request your immediate attention to the detailed interference situations outlined in our letter of August 2020.

Please feel free to contact me if you have any questions or comments.

Sincerely,



David Smith
President

Attachments

cc: Michelle M. Carey, MB
Lisa M. Fowlkes, PSHSB
David Furth, PSHSB
Rosemary Harold, EB
Roger Noel, WTB
Joel Taubenblatt, WTB