

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

In the Matter of

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

TO: THE COMMISSION

COMMENTS OF DCT LOS ANGELES, L.L.C. ON NTIA REPORT

DCT Los Angeles, L.L.C. ("DCT"), by and through its attorneys, hereby submits these comments on "*An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands*" released by the National Telecommunications and Information Administration ("NTIA") on July 23, 2002 (the "*NTIA Report*") in response to a *Public Notice*, DA 02-1780 released on July 24, 2002.

I. INTRODUCTION AND BACKGROUND

DCT is the licensee of two MDS channels – the Anaheim MDS Channel 2 station WGX394 and the San Bernardino MDS Channel 2 station WHT573 (collectively the "Stations"). The Stations are Channel 2 stations operating in the 2156-2162 MHz band. DCT is interested in this proceeding and the *NTIA Report* insofar as both contemplate displacing MDS Channel 2 operations to new spectrum to authorize spectrum for 3G services.

DCT has not leased its spectrum to "wireless cable" or "fixed broadband wireless" service providers. DCT has always provided service directly to the end-user. DCT also is not a member of the Wireless Communications Association International.

DCT paid fair market value for the Stations. DCT purchased the Anaheim MDS 2 station in 1991 from the original licensee, Broadcast Data Corporation, in a private transaction. DCT acquired the San Bernardino MDS 2 station in March 1993 through a competitive auction held on behalf of The Microband Companies Inc. in the context of a bankruptcy proceeding.

Each of the Stations provides service to portions of the Los Angeles, CA Basic Trading Area ("BTA"). The Anaheim MDS station has in excess of 2,500,000 line-of-site homes within its 35-mile radius protected service area ("PSA"). The San Bernardino MDS station has in excess of 600,000 line-of-site homes within its PSA. Thus, the Stations provide line-of-site service to a substantial number of the over 15,000,000 persons in the Los Angeles BTA.

Since 1991, DCT, by itself or through an affiliate, has used the Stations in analog mode to deliver regional news programming to cable systems and related entities. Initially, DCT carried Headline News Local Edition, which is produced and distributed, respectively, on behalf of KCAL-TV/Channel 9 and Adlink, a cable advertising interconnect firm, to over 20 greater Los Angeles area cable systems serving over a million subscribers. A second service, Orange County Newschannel ("OCN"), was later added and distributed to cable systems with over 550,000 subscribers. At present, the Stations are no longer being used to distribute OCN as another cable MSO, Adelphia Communications purchased Century and closed down OCN on September 7, 2001. DCT is in the process of developing a new business plan for the Stations, which is very difficult and frustrating during a period of dramatic regulatory uncertainty for the band.

II. DISCUSSION OF NTIA REPORT

In its November 8, 2001 reply comments in this proceeding, DCT provided the Commission with its views on what spectrum would meet DCT's needs in the event that the Commission ultimately decides to relocate MDS Channel 2 to other frequencies. At that time,

DCT and others believed that a relocation of MDS Channels 1 and 2 was only one of many proposals that could be adopted for 3G spectrum.

The *NTIA Report* presents a new perspective. What is clear from the *NTIA Report* is that, if spectrum is allocated for 3G services, MDS channel 1 and 2 licenses will be relocated to other spectrum. Suitable spectrum for 3G services is scarce, and acquiring that spectrum will require displacing existing spectrum users. The only spectrum identified for 3G services in the *NTIA Report* is a governmental band paired with the 2110-2170 MHz band, which includes MDS Channels 1 and 2.¹ The proposal, at least for now, is to divert for 3G services 45 MHz from the 60 MHz within the 2110-2170 MHz band. While that proposal leaves enough spectrum (15 MHz) untouched to avoid taking the MDS Channels 1 and 2 (12 MHz) spectrum, it is fanciful to believe that MDS Channel 1 and 2 licenses will be spared.

In that regard, the most likely scenario is the reallocation of the spectrum in one contiguous 45 MHz block. Building a 45 MHz spectrum platform from non-contiguous band segments is a less efficient use of the spectral resource. It would require at least one and probably two guardbands in addition to those that would be required to reallocate a contiguous swath of this spectrum, thus wasting spectrum and possibly increasing the cost of subscriber units. Assuming that the 3G allocation will be a contiguous 45 MHz block, invasion of the MDS

¹ The *NTIA Report* offers no significant conclusions or recommendations with respect to the 2110-2170 MHz band; rather, it goes only so far as to say that this band is probably the best among available candidate bands for reallocation for 3G mobile services and that 45 MHz would be needed from this band.

DCT is not in a position to critique the determination of the joint FCC/NTIA task force that 90 MHz of spectrum in the 1710-1770 MHz and 2110-2170 MHz bands “can be allocated for 3G services to meet increasing demand for new services without disrupting communications systems critical to national security.” *NTIA Report*, at 1. Further, DCT is not in a position to say whether this 90 MHz of spectrum is enough spectrum for 3G needs. Accordingly, these comments assume that at least 45 MHz will be taken from the 2110-2170 MHz band.

spectrum is unavoidable, because MDS spectrum is within the 45 MHz whether one counts out 45 MHz working from the top or the bottom of the band. The least disruptive and most efficient proposal would draw the 45 MHz for 3G from the upper 2125-2170 MHz portion of the band, with the consequence of displacing all MDS Channel 1 and 2 stations. This proposal is superior to the alternative of taking the 45 MHz from the lower end of the band because using the lower portion of the band between 2110 and 2155 MHz would displace so many more incumbent licenses than would be displaced if the 45 MHz were drawn from the upper portion of the band between 2125 and 2170 MHz.² Even if the lower portion of the band between 2110 and 2155 MHz were reallocated for 3G uses, still the MDS Channel 1 would be eliminated, thus forcing the Commission to consider a new spectrum home for it and MDS Channel 2 because they tend to be used in tandem in existing 2-way MDS systems. From the standpoint of MDS, these scenarios are conservative because they assume a pair of 45 MHz 3G service bands, when the size of the band might be increased.

In view of the *NTIA Report*, it is of utmost importance to MDS Channel 1 and 2 licensees that the Commission decide as soon as possible if they will be displaced by 3G services and, if so, to what spectrum and with what service and technical parameters. MDS Channel 1 and 2

² This conclusion as to the relative license displacement impact of the two proposals is based upon information provided in the *NTIA Report*. According to the information on existing uses of the various portions of the 2110-2170 MHz band set forth on pages 7 and 8 of the *NTIA Report*, if the allocation were taken from the bottom of the band, the Commission would need to relocate 5,904 point-to-point stations (3,454 from the 2110-2130 MHz band and 2,450 from the 2130-2150 MHz band), 56 paging and radiotelephone stations, 47 LTTS stations and one general aviation station. In contrast and again using information from pages 7 and 8 of the *NTIA Report*, assigning the top of the band to 3G services (i) requires the relocation of only a number of point-to-point stations that is only 56% of the number of those stations that must be relocated if the bottom of the band is taken (a total of 3,340 stations, composed of 890 stations in the 2160-2165 MHz and 2,450 stations in the 2130-2150 MHz band), (ii) requires the relocation of only a number of paging and radiotelephone stations that is only 23% of the number of those stations that must be relocated if the bottom of the band is taken (56 versus 13 stations), (iii) requires the relocation of 7 less LTTS stations, and (iv) requires no relocation of general aviation stations.

licensees have had to weather an extended period of regulatory limbo inherently damaging to their businesses. Further delay in the decision exacerbates the harm.

Moreover, the displacement decision should be made based upon the acceptability of a displacement plan, requiring that the Commission examine and fully determine displacement alternatives in the context of the decision to displace and not after the fact. MDS does not present a situation where, as suggested in the *NTIA Report* for point-to-point licensees, spectrum refugees can simply retune to frequencies in other bands with little interference concern. The MDS licenses authorize omnidirectional operations that are quite hard to protect and that cannot be shoehorned into frequency bands used by incumbent licensees. Because of this characteristic, a reallocation of MDS channels 1 and 2 is likely to require a change not only in frequency band but in what the licensees are able to do in the new spectrum. It is very hard to commit to business plans when this prospect of an undefined change in what can be done with spectrum casts a constant shadow over business plans. It would make no sense to determine that a reallocation of a large amount of spectrum is required for 3G and then find out, after the fact, that there are difficult issues surrounding the relocation of MDS channels. Prudence suggest determining what bands and technical parameters are acceptable substitutes for MDS Channels 1 and 2 now, so that MDS is neither a hindrance to the eventual 3G allocation decision nor a stepchild whose needs are unnecessarily overlooked.

Proposals for the reallocation of the MDS Channels 1 and 2 are already before the Commission. In reviewing the bands available as new spectral homes for MDS Channels 1 and 2, DCT's November 8, 2001 reply comments in this docket gave favorable mention to both the 1910-1930 MHz band now available to unlicensed PCS stations and the 1990-2005 MHz band recently authorized by conditional construction permits to the 2 GHz Mobile-satellite Service

("MSS") applicants. Of the other available bands, they are either more suited for 3G services or are unsuited to MDS Channel 1 and 2 operations.³

More recently, the Commission received a proposal for the reallocation of MDS Channels 1 and 2 developed by BellSouth Corporation, Sprint Corporation, Nucentrix Broadband Services, Inc. and WorldCom, Inc. (the "Operators' Proposal") in a July 11, 2002 letter to Chairman Powell. The Operators' Proposal is a hybridized version of proposals already made by DCT in this docket. In brief, the Operators' Proposal is to reallocate MDS Channel 1 to the paired 1910-1913/1990-1993 MHz bands and MDS Channels 2/2A to the paired 1913-1916/1993-1996 MHz bands. In addition, this proposal includes splitting the overlapping protected service areas ("PSAs") of cochannel stations so that each station receives one-half of the overlap, thereby allowing the overlap area of PSAs to be used.

DCT has analyzed the Operators' Proposal and finds it is a well-conceived, very efficient, flexible, and an acceptable displacement plan for MDS Channels 1 and 2. While this proposal is not discussed in the *NTIA Report*, it should be considered now in light of the direction taken by the report and the need to rapidly decide whether suitable alternative spectrum is available for MDS Channels 1 and 2. DCT believes that the Operators' Proposal can be adopted by the Commission without issuing a further notice of proposed rule making or requesting any further round of pleadings, because the Operators' Proposal is responsive to earlier requests in this

³ DCT's relocation band focus has been restricted to bands identified in this proceeding as available for relocation. DCT believes that other bands can only be considered in the context of another notice of proposed rule making, the issuance of which will protract this proceeding further. A rapid conclusion of this proceeding must be a high priority, as this proceeding causes great uncertainty for bands subject to possible reallocation, resulting in financial harm to licensees and users of those bands and their ability to use those bands in the public interest. Accordingly, a consideration of bands not already identified in this proceeding should be avoided to the maximum extent possible.

docket for discussion of the displacement of MDS Channel 1 and 2 licenses to either the 1990-2025 MHz band or the 1910-1930 MHz band.

The Operators' Proposal is the least disruptive to existing operations of all proposals for relocating MDS Channel 1 and 2 licenses that have been proposed. It targets spectrum that either (i) is completely vacant or (ii), while licensed, is not yet used, can be taken with little additional disruption to its expected incumbent users, and which includes an unlicensed and hence freely available block of spectrum.

The portion of the 1910-1930 MHz band targeted by the Operators' Proposal is not used at all.

The portion of the 1990-2025 MHz band targeted by the Operators' Proposal, while recently subject in part to conditional construction authorizations issued in the MSS, is not used. In addition, there is available an unlicensed reserve in this band that provides approximately half of the spectrum needed by the Operators' Proposal from this band. The remaining needed spectrum can be reallocated with little significant disruption to its conditional permittees.⁴

MSS frequencies were allocated in a unique manner, without an auction, that created little legitimate claim by any one MSS licensee to any given amount of bandwidth. The allocation system was designed to avoid mutual-exclusivity by dividing the MSS band into one more than the number of applicants and giving each applicant a right to occupy one of the segments of that band determined by that division.⁵ Thus, in exchange for free spectrum, the MSS applicants gave up any expectation of receiving any minimum amount of bandwidth. Thus, and as explained below, the reallocation of the small amount of MSS spectrum proposed in the Operators'

⁴ Authorizations to use the 2 GHz MSS spectrum were issued on July 17, 2001. Under those authorizations, the construction of satellites is not required to begin until January 17, 2004. *The Boeing Company*, DA 01-1631, at ¶ 27 (International Bureau; rel. July 17, 2001)

⁵ *Id.* at ¶ 8.

Proposal should not raise issues of fairness to MSS permittees because this reallocation puts the eight MSS permittees in no different of a position than they would have occupied if there had been 9 rather than 8 MSS system applicants. In that event, each MSS applicant would get less spectrum but each would have no right to complain of the result of the process. The only difference here is that the spectrum goes not to a ninth MSS competitor, but to displaced MDS.

In that regard, there is already 3.88 MHz of spectrum available that could be given to MDS at 1990-1993.88 MHz without taking any spectrum from MSS authorization holders. This unassigned spectrum resulted from the MSS licensing formula's division of the spectrum by a number that is 1 more than the number of applicants, thus creating a spectrum reserve of 3.88 MHz within the 1990-2025 MHz band. To get the additional approximately 3 MHz in the 1990-2025 MHz band needed to implement the Operators' Proposal, each existing MSS authorization holder would be required to give up less than 10% of its uplink allocation. If, as DCT expects, the 2165-2170 MHz part of the MSS downlink band is allocated to 3G services, a total of 8.88 MHz of MSS uplink spectrum will be available for MDS relocation by dint solely of the 3G spectrum allocation, and not any separate decision to take the spectrum for MDS, because the 3G allocation decision will orphan a corresponding 5 MHz in the MSS uplink band.

Notably, this reallocation of MSS frequencies requires no one MSS licensee to change its plans or system design, or otherwise shoulder costs, because MSS licensees are required to build satellites that are capable of operating over no less than 70% of the MSS frequencies,⁶ and no licensee can select its specific frequencies until after it places its first satellite in orbit.⁷ Because it is likely that some 2 GHz MSS permittees will not meet construction milestones, it is likely that

⁶ *The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, IB Docket No. 99-81, Report and Order, 15 FCC Rcd 16127, 16152 ¶ 52 (2000) ("2 GHz MSS Order").

⁷ *Id.* at 16138 ¶ 16.

additional 2 GHz MSS spectrum will be available to assure those who actually launch systems experience no loss of bandwidth due to the Operators' Proposal.

The Operators' Proposal allows for the flexible use of the displaced MDS Channel 1 and 2 operations in a manner that should assure the ability of these frequencies to meet ever-evolving customer demand long into the future. The key to this flexible use is the split of each channel into two subchannels which, collectively, are a channel pair. As a result, a licensee of just one channel can offer a complete two-way service without the necessity to enlist the spectrum licensed to a third party. Or, if two-way service is not required, a single licensee may still offer one-way service. Because the Operators' Proposal places the pairs assigned to MDS channel 1 next to the pairs assigned MDS channel 2, the ability to continue to use these channels together as a superchannel is preserved, and the ability to have a 2-way superchannel system is created.

Also part of the Operator's Proposal is the split of overlapping cochannel PSAs. Currently, there are several situations in which MDS Channel 1 or 2 stations have 35-mile PSAs that overlap a cochannel station's 35-mile PSA. This overlap resulted when the Commission changed the definition of the PSA in 1995 from a formula that produced a 15-mile radius PSA for an omnidirectional station, to a universal 35-mile radius PSA. These overlap areas cannot be used to host transmitters because it is impossible for one licensee to place a transmitter in this shared PSA without causing interference to the other licensee who shares this PSA. This overlap area is, thus, wasted. Splitting PSAs evenly between the involved cochannel stations is the industry-accepted means of resolving the problem without Commission assistance, assuming that both licensees are cooperative which is not always the case. DCT's stations are encumbered by this overlap problem. DCT believes that FCC-mandated PSA splitting will benefit DCT and others, not to mention the public interest in making more efficient use of the spectral resource.

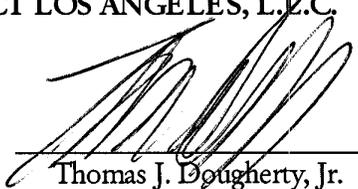
But, while the Operators' Proposal is so efficient and forward-thinking, it underscores the fact that any reallocation of MDS Channels 1 and 2 to alternative spectrum will most likely involve a change in what the channels can do. In the case of the Operators' Proposal, high power operations must be sacrificed. Other proposals could have the same or other results. The import of this observation is that a realistic prospect of a change in how or what can be done with the channels counsels a rapid decision on the spectrum that will be allocated for MDS channels 1 and 2 and the rules governing the use of that spectrum by the MDS channel 1 and 2 licensees.

III. CONCLUSION

For those reasons, the Commission should move rapidly to implement the Operators' Proposal.

Respectfully submitted,

DCT LOS ANGELES, L.L.C.

By: 

Thomas J. Dougherty, Jr.
Gardner, Carton & Douglas
1301 K Street, N.W., Suite 900, East Tower
Washington, DC 20005-3317
(202) 408-7164
tdougherty@dc.gcd.com

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