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

In the Matter of)	
MSS Systems at 1.6/2.4 GHz)))	IB Docket No. 02-364

To: The Commission

SBE Filing in Support of the October 27, 2004, Nextel Filing Regarding the September 8, 2004, SBE Petition for Reconsideration of the IB Docket 02-364 R&O

The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members world wide, hereby files in support of the October 27, 2004, *Nextel Communications' Opposition to Petitions for Reconsideration of Globalstar LLC and Society of Broadcast Engineers, Inc.*

I. Background

1. On September 8, 2004, SBE filed a timely Petition for Reconsideration of the IB Docket 02-364 Report & Order (R&O). The SBE filing noted that Mobile Satellite Service (MSS) ancillary terrestrial component (ATC) operations at 2,487.5–2,493 MHz simply could not coexist in the same area and at the same time as "grandfathered" TV Broadcast Auxiliary Service (BAS) operations on Channel A10 (2,483.5–2,500 MHz). The SBE reconsideration petition noted a similar problem for Broadband Radio Service (BRS) Channel 1 (2,496–2,502 MHz), as adopted in the July 29, 2004, WT Docket 03-66 R&O.

2. SBE accordingly proposed re-farming the 2.5 GHz TV BAS band to three 12-MHz wide digital channels, starting at 2,450 MHz, the current lower channel edge of TV BAS Channel A8 (2,450–2,467 MHz); this would cause the upper edge of re-farmed TV BAS Channel A10d (d for digital) to clear the bottom edge of MSS ATC by 1.5 MHz, thus eliminating the conflict with both MSS ATC and BRS1.

II. Nextel Counterproposal

3. Nextel opposed this SBE plan, on the grounds that an immediate re-farming on the three 2.5 GHz TV BAS channels would create a linkage to Private Operational Fixed Service (POFS) and Local Television Transmission Service (LTTS) stations presently operating between

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2,450–2,483.5 MHz. Those services would also have to be re-farmed, and Nextel saw this as delaying the re-farming of the 2 GHz TV BAS band, as proposed in WT Docket 02-55. However, Nextel indicated that if the SBE plan were modified to a two-step plan, Nextel could then support that plan. Under the two-step plan, two of the three 2.5 GHz TV BAS channels, A8 (2,450–2,467 MHz) and A9 (2,467–2,483.5 MHz) would be "narrowed in place;" that is, their center frequencies would remain unchanged, and only their channel bandwidths would be reduced to 12 MHz. Grandfathered TV BAS Channel A10 would be quasi narrowed in place: the Channel A10d1 (d = digital, 1 = first step) center frequency would be shifted downwards by 2.25 MHz, from 2,491.75 MHz to 2,489.5 MHz. This would keep the 12-MHz wide Channel A10d1 still entirely within the existing Channel A10, but now the upper edge of Channel A10d1 would clear the lower edge of BRS1 by 0.5 MHz, this eliminating the conflict with BRS1. While there would still be a conflict with MSS ATC, SBE does not know when, or even if, that service will be deployed. Whereas SBE expects that BRS1 will be deployed quickly, in the next one to two years. Therefore, an "immediate" solution is needed with respect to BRS1.

4. Because under Step 1 any POFS or LTTS stations that are now adjacent channel to TV BAS Channels A8, A9 or A10 would remain adjacent channel to TV BAS Channels A8d1, A9d1, and A10d1, those other services would effectively be uncoupled from an immediate TV BAS Step 1 re-farming. Time is of the essence for the 2.5 GHz TV BAS re-farming in order for the manufacturers of 2 GHz TV BAS radios to include the new modulation capabilities and center frequencies for the 2.5 GHz TV BAS band in the radios that they will soon be delivering under the WT 02-55 R&O (assuming, of course, that Nextel ends up accepting the terms adopted by the Commission in that rulemaking. SBE is aware that Nextel has not yet officially done so, and that as of the date of this filing the WT 02-55 R&O still has not been published in the Federal Register).

5. Under Nextel's Step 2, once a rulemaking has been resolved how to treat POFS and LTTS licensees operating between 2,450–2,483.5 MHz, and who will pay the cost of refarming fixed link TV BAS stations on Channels A8, A9, and A10, then the three 2.5 GHz TV BAS channels could be re-packed, starting at 2,450 MHz, as TV BAS Channels A8d2, A9d2, and A10d2. This would then have the top of TV BAS Channel A10d2 clear the bottom of the MSS ATC band by 1.5 MHz. A revised proposed 2.5 GHz TV BAS plan figure is attached. At that point SBE would expect that all TV BAS eligibles would be entitled to use Channel A10d2, and not just "grandfathered" Channel A10 (or A10d1) licensees.

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6. Finally, Nextel urges that the Commission issue a Further Notice of Proposed Rulemaking (FNPRM) to allow all interested parties to fully comment on its counterproposal to the SBE Petition for Reconsideration.

7. SBE fully supports the Nextel refinement of the re-farming of the 2.5 GHz TV BAS band proposed in the SBE Petition for Reconsideration. SBE also agrees that a FNPRM should be issued.

III. Summary

8. A two-step 2.5 GHz TV BAS plan would be an elegant solution to the allocation conflicts created by the Commission by assigning MSS ATC, and BRS1, frequencies that would be cochannel with current TV BAS Channel A10. Because of the anticipated replacement of all 2 GHz TV BAS radios by Nextel, incorporating a digital capability at 2.5 GHz, and with ability to shift to the Step 1 and Step 2 center frequencies when the time comes, could be done at no incremental cost to Nextel or to the federal government (since ultimately Nextel will be entitled to a credit for its 2 GHz TV BAS relocation costs). Although the FNPRM will have to address who pays the cost of re-farming fixed-link 2.5 GHz TV BAS stations, and POFS and LTTS stations (and certainly this should not be Nextel), SBE is confident that a FNPRM can work out these details. Clearly, under the ET Docket 92-9 "emerging technologies" policy, fixed link 2.5 GHz TV BAS licensees, and POFS and LTTS licensees, will be entitled to have their relocation costs paid by the newcomer MSS ATC and/or BRS1 users. While SBE recognizes that BRS1 is already being displaced from Multipoint Distribution Service (MDS) Channel 1 (2,150-2,156 MHz), this does not alter the fact that BRS1 would now displace existing TV BAS Channel A10 licensees, which have indefinite and co-equal "grandfather" rights.

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List of Figures

9. The following figures or exhibits have been prepared as a part of this filing in support of the October 27, 2004, Nextel filing:

1. Revised proposed new TV BAS 2.5 GHz band plan.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

- /s/ Ray Benedict, CPBE SBE President
- /s/ Dane E. Ericksen, P.E., CSRTE Chairman, SBE FCC Liaison Committee
- /s/ Christopher D. Imlay, Esq. General Counsel

November 19, 2004

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IB Docket 02-364 Report & Order WT Docket 03-66 Report & Order

Existing vs Proposed New 2.5 GHz TV BAS Band Plan



All frequencies and bandwidths are in MHz.



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