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

In the Matter of	**)**	
	)	
Amendment of Part 74, Subpart D of the	**)**	**RM - 11648**
Commission's Rules	**)**	**RM - 11649**
	)	
Request for Temporary Waiver of Section	**)**	
74.462 of the Commission's Rules to Permit	**)**	
Licensees of Remote Pickup Broadcast	**)**	
Auxiliary Stations to Utilize Digital Radio	**)**	
Telephony and Data Emissions	**)**	

To: The Commission

COMMENTS OF KENWOOD USA CORPORATION

Kenwood USA Corporation (Kenwood), by its regulatory counsel, pursuant to Section 1.405 of the Commission's Rules (47 C.F.R. § 1.405) hereby respectfully submits its comments[1] in support of the above-captioned *Petitions for Rule Making* filed by the Society of Broadcast Engineers, Incorporated ("SBE") and by Engineers for the Integrity of Broadcast Auxiliary Service Spectrum ("EIBASS"). Kenwood also hereby states its support for the *Request for Temporary Waiver* filed by SBE on November 7, 2011, which requested interim relief relative to the rule changes proposed in SBE's Petition. The SBE Petition and the EIBASS Petition each request similar relief relative to modification of Section 74.462 of the Commission's rules to permit additional digital emission modes, thus to facilitate the use by Broadcast Auxiliary Service (BAS) Remote Pickup Service

[1] These comments are filed after the date for comments and reply comments pursuant to Section 1.405 of the Commission's rules. The SBE and EIBASS petitions were placed on public notice on December 21, 2011. However, no action has been taken with respect to either Petition and no action has been taken on SBE's Temporary Waiver request. Therefore, no party is prejudiced by the late filing of these comments and it is respectfully requested that they be accepted and considered substantively by the Commission in evaluating the two petitions and the SBE Temporary Waiver request.

(RPU) licensees of certain digital voice and data emissions in BAS allocations at VHF and above by RPU Stations (Subpart D, Part 74). Among other things, each Petition seeks to facilitate the use of existing, narrowband, spectrum-efficient digital voice and data technology. Among the digital emissions proposed to be permitted for the first time are NXDN® Common Air Interface 12.5 kHz narrowband and 6.25 kHz very narrowband emissions. Kenwood manufactures and sells worldwide NXDN two-way radio systems under the NEXEDGE® trade name that would, by the rule changes sought by SBE and EIBASS, be made available for the first time for use by broadcast auxiliary stations in the Remote Pickup Radio Service for news gathering and remote broadcast audio transmission. Kenwood states as follows:

1. NXDN is a very spectrum-efficient technology which is now in widespread use nationwide by Part 90 PMRS licensees. It has clear advantages for broadcasters for transmitting program material with high audio quality and an exceptionally narrow occupied bandwidth.[2] NXDN uses 4-level FSK modulation and FDMA for the access method.[3] Kenwood's NEXEDGE NXDN system channelizes in 3.125 kHz steps, which is consistent with the SBE- proposed channel stacking protocol. Although it is not possible to achieve 6.25 kHz channel bandwidth efficiency using analog technology, Kenwood's NEXEDGE equipment supports both analog 12.5 kHz and 25 kHz emission legacy operating modes and 6.25 KHz and 12.5 kHz digital modes, offering operation in both legacy and digital modes at any media event. It also offers a conventional mixed mode whereby both analog and digital emissions can be used on the same channel, and

[2] Kenwood's NEXEDGE radios can utilize 6.25 kHz channel bandwidths with an occupied bandwidth of 4 kHz.
[3] NXDN products conform to the Digital Mobile Radio (DMR) Tier 2 Standard, which is a published, open standard (See, ETSI TS 102-361, parts 1-4).

additionally, it utilizes conventional Internet Protocol capacity so that coverage can be extended into tunnels, passages and levels of convention centers, sports arenas and stadiums for sports and news coverage. Trunked configurations of NEXEDGE are possible, which offer multi-channel use for multiple entities to permit simultaneous talk path access at news events.

2. NXDN technology easily facilitates the gradual conversion from analog voice to narrowband digital voice and data technologies by RPU station licensees. It should clearly be permitted where analog voice and data emissions are now permitted pursuant to Section 74.462 of the Commission's Rules. SBE's petition notes that the 2002 *Report and Order* in ET Docket No. 01-75[4] which extensively rewrote the Part 74 BAS Rules held that Remote Pickup Service licensees will benefit by having the capability to choose from a wide variety of radios. It was further held therein that in accordance with the Commission's proposal to standardize Remote Pickup channels with those listed in Part 90, RPU licensees should adhere to the technical standards of Part 90. In this way, the Commission stated, "Part 74 licensees could choose from among the wide variety of radios available for PLMRS licensees." Furthermore, the Commission applied to BAS RPU channels the Part 90 technical rules for the emission mask (47 C.F.R. § 90.210) and frequency stability (47 C.F.R. § 90.210). The Commission should at that time have permitted digital emissions for RPU stations when it rewrote the Part 74 rules. Narrowband digital emissions have been permitted for some years by part 90 PMRS licensees and there is no reason why it is not permitted in Subpart D of Part 74 now,

[4] 17 FCC Rcd. 22979, released November 13, 2002.

except for historical reasons.[5] BAS licensees have a need for radios with the same functionalities as do Part 90 PMRS licensees.

3. The increased spectrum efficiency offered by NEXEDGE equipment for RPU operations, for dispatch and operational traffic and for program material transmission will, as the Commission has already determined, encourage narrowband conversion by RPU licensees and increased spectrum efficiency. Therefore, Kenwood supports SBE's and EIBASS' similar proposals to amend Section 74.462 of the Commission's rules to permit RPU licensees to utilize any emission that meets the applicable emission mask and bandwidth limitations.

4. Because it is desirable to encourage implementation of NXDN spectrum-efficient digital technology in the RPU Service right away, and due to the inherent delay in implementing even non-controversial rule changes through normal processes, Kenwood urges the Commission to proceed immediately to facilitate the BAS digital conversion process and to encourage spectrum efficiency in the RPU service by granting SBE's November 7, 2011 *Request for Temporary Waiver* of Section 74.462. this would permit RPU licensees to immediately begin utilizing NXDN radios *already certified for Part 74 use.* Because RPU channels are shared among BAS licensees, and because use of the RPU channels (which since 2002 have been divided into 6.25 kHz channel segments), are coordinated in real time by SBE frequency coordinators in a cooperative shared RF environment, there is no reason to delay the immediate implementation by waiver of the

[5] It is noted in this connection that the BAS Low Power Auxiliary rules, at Section 74.861(e)(3), permit the use in that service of "any form of modulation" subject to a maximum deviation (bandwidth) limit. The same flexibility should be permitted for RPU operation.

authority to utilize off-the-shelf NEXEDGE equipment in the BAS RPU Service pending completion of the rulemaking.

5. SBE and EIBASS propose substantially different methods of addressing a problem unique to the Part 74 RPU Service, which, unlike Part 90, permits channel stacking for the transmission of wider bandwidth program material for broadcast.[6] Because of the stacking provision in the RPU rules, there can result from certain stacking configurations a center frequency that extends to six decimal places. This anomaly makes it difficult in some configurations to specify a channel center frequency compliant with the current rules. Kenwood expresses no view on the proper solution to this anomaly, or on the quite different solutions proposed by SBE and by EIBASS. However, it is noted that the SBE-proposed solution involves an efficient channel stacking formula premised on stacking in 3.125 kHz steps that could alleviate the problem. It would do so in a way that would avoid the inefficiency of specifying a table of channel centers listing channels of varied bandwidths, some of which may not be useful in a given market. Kenwood's NEXEDGE equipment can channelize in 3.125 kHz steps, and therefore could be very useful in implementing the SBE proposed solution to the channel center issue.

6. Since 2002, the deployment of digital technologies in land mobile radio has accelerated substantially, as has the use of more narrowband technologies. Most commercially manufactured equipment for Part 90 PLMR use is also certified for Part 74 use, including Kenwood's NEXEDGE radios. Since that equipment is ready for deployment in the Part 74 RPU bands but for the limits on emission designators found in Section 74.462, it is timely to modify that rule to permit the cost efficiencies and spectrum economy of deploying digital emissions in the RPU service with minimal

[6] See, Section 74.402 of the Commission's Rules.

limitation. The existing emission mask regulations and bandwidth limitations are adequate to safeguard analog or digital adjacent channel users and it is therefore not necessary to limit emission designators as the current rules do. NXDN equipment is ready and available for use and is certified for Part 74 operation and there is substantial demand for this equipment among BAS licensees for RPU use. Therefore, Kenwood supports the SBE and EIBASS proposals to permit NXDN technology in the RPU Service, and most especially, Kenwood supports SBE's requested temporary waiver to permit the emission types used by these technologies *pendente lite*.

Therefore, for the reasons discussed herein, Kenwood USA Corporation respectfully requests that the Commission issue a notice of proposed rulemaking at an early date proposing the revision of Section 74.462 of the Commission's Rules, and as well that the Commission issue an Order granting the SBE Request for Temporary Waiver filed November 7, 2011.

Respectfully submitted,

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July 11, 2012