

September 16, 2010

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

**Re: Notice of *Ex Parte* Presentation,  
ET Docket Nos. 04-186, 02-380;  
WT Docket Nos. 08-166, 08-167;  
GN Docket No. 09-157**

Dear Ms. Dortch,

On September 15, 2010, Harold Feld of Public Knowledge spoke with Rick Kaplan, Chief Legal Counsel to Chairman Genachowski, with regard to the above captioned proceeding.

As Public Knowledge (PK) explained, above all, it is important to remember that this order balances numerous complex concerns with regard to protection of incumbent services. The FCC's Office of Engineering and Technology has spent more than four years extensively testing and studying the technology. The Commission should trust that these engineers have exercised due caution in their responsibility to protect incumbents. At this stage, the layering of additional unnecessary "protections" as demanded by incumbents threatens to impose significant costs that jeopardize the future of the service.

For example, incumbents have argued that requiring mode II devices to check the base station every 60 seconds and for the base station to check the database every 15 minutes is a minor change to protect wireless microphones used for news gathering. But such a change has severe consequences from the drain on battery power to the dramatic increase in traffic from devices to the database. Indeed, such a dramatic increase in traffic appears remarkably similar to the increase in routing traffic which nearly caused the collapse of the Internet in the mid-1990s. If the Commission were to make this change, it would create a situation where successful deployment would drive up cost of equipment and spectrum inefficiency until the service collapsed.

This is hardly a minor change. Yet the broadcasters have requested what amounts to a poison pill on the off chance that all other protection would prove insufficient for mobile news crews. The Commission should resist this and other efforts by opponents of unlicensed white spaces use to place such obstacles in the path of this new technology.

With regard to the procedural objections raised by MSTV/NAB, the PK observed as an initial matter that the Commission had specified in the 2008 *Second Report and Order* that it would address matters pertaining to the database via Public Notice (§227). Even without this initial delegation of authority and notice to interested parties, the Bureau issued a Public Notice and

provided adequate opportunity for notice and comment. Resolution of the pending database administration questions by OET on delegated authority would not violate the Administrative Procedures Act (APA).

With regard to whether the Commission should, as a matter of policy, require another full vote of the Commission, the PK noted that the Commission must weigh the benefits of such a process against the cost of delay. The issues raised by NAB/MSTV, while important, are highly technical and precisely the sort of issues best dealt with by the FCC's expert engineering staff. In the event NAB/MSTV are dissatisfied with OET's resolution, they may still appeal the result to the full Commission. By contrast, further delay before final resolution of the rules would introduce yet more costly uncertainty into a lengthy process of testing that has stretched over 8 years since the Spectrum Task Force first proposed this initiative. The dedication and resources expended by the companies eager to develop this technology has been unprecedented – and has limits. A decision to interject still more delay, for no better reason than to politicize the engineering process, could have a devastating impact on the willingness of companies to develop and deploy this new technology.

Even if the companies have the patience and resources to get yet another round in the face of unremitting hostility from NAB/MSTV, such a delay would impose significant cost on consumers waiting to receive the benefits of this technology. It delays the creation of manufacturing jobs and the deployment of rural broadband, and it threatens to cede the development of this technology to other countries – such as the UK, China, India, and Brazil – which are also investigating the potential for white spaces.

For the same reason, PK also asked that the Commission remove the requirement for a full Commission vote for certification of sensing-only devices. As noted in the timely *Petition for Reconsideration* filed by several parties, such a requirement is unprecedented and sets a dangerous precedent of politicizing the engineering process. It adds unnecessary cost and delay without adding any value.

Again for similar reasons, PK urged that the Commission reject for a second time the proposals of Fibertower, *et al.* to allocate channels for licensed backhaul. PK agrees that there is a significant need for wireless backhaul in rural areas. Further, PK recognizes that Fibertower, *et al.* have made efforts in recent proposals to recognize the needs of those using unlicensed in the band. Nevertheless, the uncertainty that grant of the Fibertower proposal would introduce at this stage would almost certainly be fatal to the development of unlicensed use in the TV white spaces. The existence of off-the-shelf equipment, for example, does not provide guidance on such critical details as power levels, out-of-band emissions, or other factors that would impact WISPs and community wireless networks attempting to use the spectrum for delivery of broadband. The Commission would need to conduct an additional rulemaking to resolve the many questions raised by the Fibertower proposal. Parties considering investment or deployment in the band would be unwilling to commit until the details of this new rulemaking were settled, or might simply give up on the band altogether.

With regard to wireless microphones, PK reviewed previous concerns that the combination of reserved channels and possible access to the database by users of grandfathered Part 15 wireless

microphones would deprive users of needed channels in the most populous urban markets, placing the success of the technology at risk with no demonstrated need. The Commission's initial engineering analysis in the 2004 *Notice of Proposed Rulemaking* found that TV white space devices would *not* interfere with wireless microphones because of the design of these systems and their higher power. Since that time, proponents of additional safeguards for wireless microphone users have utterly failed to present any credible evidence to support their interference concerns. Instead, they have merely offered criticism of studies showing that operation of white spaces devices would not interfere, and have asked the Commission to presume that interference would occur. To sacrifice spectrum capacity needed for next generation technology to appease the unsupported concern of Part 15 wireless microphone users is both unjustified and potentially puts the viability of the technology at risk.

PK proposed that unlicensed wireless microphones should be confined to the two available channels adjacent to Channel 37 on a *non-exclusive* basis, meaning that wireless microphones would be registered as Part 15 devices in the geolocation database on these channels for the specific event. If additional white space spectrum is needed, then unlicensed wireless microphones should be permitted to register to use Channels 14-20 (where no mobile devices are allowed). However, if the Commission decides to make additional spectrum available, PK suggested the following: (1) use of other channels should be upon application to the Commission (OET on delegated authority following public notice) and with a certification made under penalty of perjury, (2) there should be a meaningful application fee to cover the administrative costs, which would also serve to prevent unnecessary blocking of channels that could be used for other purposes, (3) the application must show that Channels 14-20 and the two non-exclusive channels are not available based on a specific showing and reasonably efficient technical solutions, and the inability of existing microphone equipment will not be sufficient to meet this criterion, and (4) the application must be for specific channels on specific dates/times, not an open-ended application which will tie up spectrum capacity even after wireless microphone use ceases in the area.

In accordance with Section 1.1206(b), this letter is being filed with your office. If you have any further questions, please contact me at (202) 861-0020

Sincerely,

*/s/ Harold Feld*

Harold Feld

Legal Director

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Cc:  
Rick Kaplan