Lions and Tigers and Bears, Oh My!

I try to avoid responding in a serious manner to those who want you to believe that they can barely control their emotions over the potential injustices that would be perpetrated against unknowing licensees if they were not there to issue a call to arms and personally defend the masses. In this case a response is necessary in order to respond to the incredible number of inaccuracies in what appears to be a widespread solicitation to provide representational services to supposedly unsuspecting 900 MHz incumbents.

The solicitation was sent to 900 MHz incumbent licensees by a DC-based attorney. The subject matter is the joint EWA/Pacific DataVision Petition for Rulemaking that proposes a realignment of the band to create a 3/3 MHz priority based broadband capability for critical infrastructure and business enterprise uses that has been discussed at many EWA and other industry meetings. EWA did not say that the transition would be easy, or that a decision should be made quickly without the benefit of the Federal Communications Commission and industry insights, concerns and participation. That’s how spectrum repurposing works. We can always be told to go away and to take our idea with us. It wouldn’t be the first time. But there is no benefit to anyone involved if positions are adopted based on fiction rather than fact. It is a colossal waste of time to react to untruths or even partial truths.

The solicitation letter before 900 MHz incumbents at least introduced the subject matter accurately (other than the suggestion that the realignment would result in harmful interference), but it went rapidly downhill immediately thereafter. Let’s set the record straight on at least the basic facts so that those who are interested understand the proposal that is actually pending before the FCC:

- The author states as a fact that operating a broadband LTE system will automatically cause interference to adjacent narrowband operations. In fact, the out-of-band emissions standards proposed for this band and the filtering to accomplish them exceed the requirements in any other band. Most important, the FCC would never authorize a band realignment unless it was satisfied that its technical requirements would ensure that the LTE operation would NOT result in harmful interference. To suggest otherwise means that the technical experts at the FCC, including the engineers in the highly respected Office of Engineering Technology, are either incompetent or negligent. Anyone who has worked with them knows that is not the case.

- The letter repeatedly warns that incumbents would be entitled to interference protection based on a -85 dBm standard for mobiles and -88 dBm for portables. Those standards were proposed originally based on the current FCC rules defining 800 MHz interference protection rights for public safety incumbents, which the FCC presumably thinks are appropriate for first responders. But in their Joint Reply Comments, EWA/PDV recommended that 900 MHz incumbents get superior protection with standards of -98 dBm for mobiles and -95 dBm for portables. Apparently the author has not kept up to date on the proposal.

- The letter says that migrated licensees would not be compensated for additional infrastructure if that were needed to provide comparable facilities. That statement is flat out wrong. While EWA/PDV do not believe that additional facilities will be needed, the record is clear that comparability means comparability. If that requires more sites, then the broadband licensee either has to provide them or the incumbent cannot be relocated.
There are numerous other inaccuracies and misrepresentations in the letter. For example, it implies that EWA is anticipating untold frequency coordination riches as a “major frequency coordinator for the 900 MHz Band ... and EWA apparently would be the realignment manager.” Au contraire … while EWA is a major frequency coordinator, the 900 MHz band represents less than 5% of its coordination workload. There is little activity in the band because all channels have been assigned in the major urban markets for decades, and there has been very little interest in this spectrum outside those areas. As for realignment responsibility, EWA/PDV recommended in their Reply Comments that any interested frequency coordinator that signs a Memorandum of Agreement like the one used for Sprint-vacated spectrum should be eligible to provide realignment/coordination services for incumbents. (This is another instance where the author apparently has not kept up to date with the record.) I should be insulted by the insinuation that we are profiteers, but my mother always advised me to consider the source.

The claim that “Licensees that already are located in the remaining 2/5 of the 900 MHz band ... could lose expansion opportunity” has no basis in fact. Has the author looked at the ULS database for 900 MHz spectrum in any urban area? Apparently not, because if he had, he would know that there are very limited expansion opportunities today. It is not possible to tell whether all the channels are actually in use, but from a coordination/licensing perspective, the 900 MHz cupboard is bare in urban markets and has been for many years. Incumbents have had over thirty years to expand their capacity and geography, and they have done so in those markets. Once you venture outside of them, there is obviously considerably less utilization, but an available channel in Montana does not help a spectrum-constrained licensee in New York City.

“EWA and PDV could clarify this point by releasing a detailed migration plan. However, they decline to do so, claiming not to know who is operating in the 900 MHz band.” I don’t recall ever picking a fight with this guy! What a ridiculous statement. Does anyone truly believe that EWA does not know who is operating in the band? The information is a matter of public record by accessing the FCC’s ULS database. The truth is that until actual research is conducted on a licensee-by-licensee basis to confirm what is actually operational as opposed to being licensed, a realistic migration plan cannot be performed with any degree of accuracy. I especially love this statement, “... unconstructed facilities could be cut off ...” Oh my... lions and tigers and bears! But reasonable folks recognize that there are construction requirements and deadlines in the rules that exist to try to combat spectrum warehousing. Unconstructed facilities should be cut off consistent with the rules.

The letter warns that “The noise floor likely would rise, potentially swamping adjacent channel systems with harmful interference.” The RF noise floor is going to rise whether attributable to greater sharing at 900 MHz or by the explosive growth of broadband wireless devices and other applications that are dependent on spectrum. It is inevitable and the solution is not limited to removing RF sources, which is helpful short term, but not entirely useful long term. Deploying devices that are not so susceptible to interference must be added to the solution mix, since licensees cannot avoid the noise floor.

The solicitation ends suggesting that recipients would be wise to consult their RF engineers and equipment vendors, and if they wish to file comments, the author would be pleased to assist. He also offers to provide copies of the EWA/PDV filings, but to save time, please visit the FCC Electronic Comment Filing System page on the Rulemaking Petition to Realign the 900 MHz Band.

Maybe the next letter will suggest that the media be alerted, that the alarms be sounded, the National Guard be called up and that you hide in your basement. In all seriousness.