

July 10, 2014

Marlene H. Dortch, Secretary

Federal Communications Commission

445 12th Street, SW

Washington, DC 20554

**RE: Petitions for Rulemaking Regarding the Citizens Broadband Radio Service**

**GN Docket No. 12 – 354, RM-11788 and RM-11789**

Dear Ms. Dortch:

KWISP Internet files these comments in opposition to the Petitions by CTIA and T-Mobile.

Our company is a small Wireless Internet Service Provider (WISP) serving 700 customers in rural northern Illinois. Most of our customers are in 11 census tracts in northern LaSalle and southern DeKalb counties. Population density is low – in many cases the next house or farm is half a mile away. On many roads you see a WISP antenna (from one of 3-4 different WISPs in a given area) on nearly every roof.

We obtained our NN license for the 3650-3700 MHz band in October, 2008, and started deployment in September, 2010. We currently have 17 active sectors at 7 sites serving 70 multipoint customers. We also have 4 point-to-point links in the 3650 band.

Doing the math, 10% of our end customers are currently served using the 3.65 GHz band. Going forward though, about 50% of our new deployment uses this band. We have also moved existing customers from license exempt bands like 900 MHz and 2.4 GHz, which have become useless due to interference from consumer WiFi gear and utility company smartmeters. Our plan is to move the remaining 2.4 GHz customers to 3.65 GHz.

Other than Part 101 licensed point-to-point links, the 3.65 GHz equipment is the most expensive gear in our network. We have also had the paperwork burden of registering every customer location in ULS. And we are taking the risk that the new CBRS rules will allow us to continue serving these customers. We understand there will be new licensing costs and the need to purchase equipment to utilize the spectrum access database. We hope that all the expensive radios we have deployed will still be usable.

Why do we use this band despite the expense and risks? Unlike license exempt bands, we are able to provide fast, reliable service without constantly worrying about interference from consumer WiFi equipment, smartmeters, etc. We do not get exclusive use of the spectrum (it is “licensed lite”), so interference is possible, but coordination with other providers is much more feasible. Also the proposed CBRS rules include PALs for small geographic areas, as well as GAA operation where spectrum is unused. The use of a spectrum access database seems technically very sound compared to other spectrum sharing approaches like DFS or LBT, even though it will involve some cost and complexity for small companies like us.

Like most WISPs, we use license exempt spectrum for most of our multipoint operation. People rely on their Internet service to be fast and reliable in a way they didn’t 10 years ago. Even a disruption of a few seconds will cause problems for people streaming video, playing games, working from home, taking classes or tests online, etc. License exempt spectrum is mostly successful at filling this need, but interference and DFS false radar detects are a constant issue.

We also use Part 101 licensed links between many of our towers, and this is very successful. We small companies follow the same rules and pay the same fees as the big carriers, and the system serves everyone very well. CBRS should aim for the same goal, rules that allow both big and small companies to follow the same rules and procedures, without harm, inconvenience, or undue cost to either. This should not be a zero sum game, where one group wins only at the expense of another group.

Several things concern us about the proposals from CTIA and T-Mobile. For example, longer license terms, not grandfathering 9 years of customer deployments in 3650-3700 MHz, and other changes that would de-emphasize GAA. But the killer for us is the proposal to auction PALs based on PEAs instead of census tracts.

KWISP’s service area is essentially 11 census tracts. We would definitely bid on PALs in those census tracts, plus some adjacent tracts. We already use this spectrum to serve customers, so we would not be warehousing spectrum.

If PALs are instead based on PEAs, the bid price will likely exceed what a WISP can afford. Even if we could compete in the auction, we would certainly end up serving only part of a PEA, especially those that contain more densely populated areas along with rural areas.

The proposed changes will turn CBRS into just another band where big national or multistate companies are the only ones that can afford to bid, and then end up warehousing the spectrum (at least in the less desirable rural areas). Small ISPs and rural residents will be adversely affected.

If, however, PALs auctions are based on small geographic units like census tracts, we don’t see the adverse effect on big ISPs. They can bid on as many tracts as they wish. The comparison to Part 101 is relevant. Big and small providers should be able to follow the same rules and procedures, without adversely affecting either of them. The proposed changes seem to have a hugely asymmetric impact on small companies, who would be effectively shut out of the PAL bidding, just so big companies don’t have to submit as many bids to cover the huge swaths of territory they desire?

The current CBRS rules are well thought out, and a lot of time and work has been expended by government and industry toward putting them into action. The result will benefit consumers as well as big and small providers. Do we really need yet another chunk of spectrum sold off in huge geographic chunks to a few big providers, who will use it in areas that already have lots of good choices, and leave it fallow in areas that are underserved?

CBRS as currently defined may also promote innovation in areas like Internet of Things. This won’t happen if all new spectrum is allocated to mobile 4G/5G wireless, with the only other consideration being how much money the licenses bring in to the Treasury.

It would be easy to ignore our comments based on our small size and number of customers, compared to the big national ISPs. But without WISPs, our customers would have no good options for Internet service. The big ISPs are not particularly interested in serving rural areas with low population densities. This was true 15 years ago when we started in this area, and it is true today. And while our one company may be small, there are thousands of WISPs nationwide, serving hundreds of thousands (maybe millions) of customers.

Rulemaking decisions that favor large companies and shut out small companies from access to spectrum will have a disproportionate adverse impact on people in rural areas with few Internet options.

Regards,

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