

regarding section H, paragraph 29 - Unlicensed Spectrum in rural areas

I am CTO for wispair.net - we service urban Sarpy and Douglas counties in Nebraska, urban Pottawatomie county in Iowa, and rural Washington county Nebraska and rural Mills county Iowa.

We provide backhaul and customer connection via UNI-I band and ISM band using 802.11b. We are considering a 900MHz offering for rural and heavily wooded northern Douglas/southern Washington counties in Nebraska.

The commission's rules state that a max of +36dBm is allowed in the ISM band for point to multipoint configurations. I have seen many installations in this part of the country where a 17dB 30 degree panel is coupled with an AP and a one watt two piece amplifier to generate +47dBm. These configurations are generally found on isolated grain elevators and don't seem to be causing anyone else any interference issues.

The commission should consider recognizing the existing field practice and allow a maximum of +48dBm for point to multipoint cell sites in rural areas.

The definition of what constitutes a rural site needs some attention, but I don't know of any commission rules that set a precedent in this area. The licensed/unlicensed system is very clear while an urban/rural rule is certainly going to be abused in some cases.

I have no recommendation on the urban/rural split but I will describe one situation that I face. I currently have facilities on a 460' building in downtown Omaha, Nebraska. The metro area has a population of 700k. If I place a sector on the north side of this building I see five miles of dense light industrial and housing, but to the north of I-680 its all rural and heavily wooded. This building is solidly in an urban area, but it is the best cell site available for a large part of rural Washington and Pottawatomie counties. When you choose the method to separate rural from urban, please choose wisely.