

As an ISP that provides fixed wireless broadband and operates in ISM bands of 902-928mhz, 2402-2480mhz, 5.2ghz, and 5.8ghz, We have a significant interest to see more low-band spectrum. In our area, we have tremendous line-of-site problems due to large amounts of trees. A 'TV' band transmitter would fix such a problem.

The technical problems of interference mitigation with current Primary users of the band can be overcome with simple, mature FHSS/CD (frequency hopping spread spectrum / carrier detect) application and GPS based frequency exclusion (use GPS location to determine what channels should be in use already). The problem of CPE units not being able to 'hear' the used signals would be fixed by transmit control being assigned to the Tower or Server end, like is in many current and mature fixed wireless broadband systems today (polling protocols). In addition, with modern software configurable radios, any problems found while in 'real world use' can be fixed by updating the radio's program.

In short, there is large amounts of spectrum not being used, we feel the question is not why should we be able to use this spectrum, but why should we not be able to use this spectrum. With modern transmitters, there is not technical reason that we shouldn't be able to use this band.

In the reference to the 3.6ghz band, the same issues apply. With spectrum usage today, as a business, we can always use more bandwidth to deliver line-of-site backhaul systems. I would suggest at this time to consider making this a point-to-point band only. This will create a band that will allow maximum speed communications with minimum of interference possibility, allowing much more reliable Unlicensed National Information Infrastructure Band. I would also suggest an online mandatory database for post-install license (usage based license like Licensed Business Radio Service) (say within 30 days or instant via internet and GPS in the radios) to allow designers the ability to check for interfering sources easier, and to coordinate frequency usage.