

I am writing in response to the FCC request for public comment on questions to be discussed by the Spectrum Policy Task Force, ET Docket No. 02-135.

The current market of the industry, which is succeeding in spite of there being a hostile regulatory policy to its, existence, is the wireless Internet Broadband Industry.

Not to be confused with ventures of nationwide companies, which are failing in record numbers, but small, entrepreneurial, creative and very inventive small ventures, which are attempting to fill a public need and market demand for reasonably priced broadband service.

Ultimately, the policy of auctioning off spectrum segments to single, large ventures has had the opposite effect.

It has effectively halted the deployment of these services in the spectrum purchased for that purpose.

I submit that what is needed is a new, publicly accessible set of Registered/Licensed spectrum which is restricted to the purposes of two-way transmission, distribution, and connectivity of wireless broadband.

Present policy contains insufficient spectrum segments for the needs of this industry - the greatest of which is for point to multipoint distribution of broadband in a non line of sight setting. In order for this to be effective, it should be "Registered/Licensed use".

There are about eight thousand (8000) Wireless Internet Service Providers (WISP). Currently utilizing 900 Mhz., 2.4 & 5.8 Ghz. ISM/UNII Bands, the problem is that out of the three frequencies listed all but one is strictly line of sight, 900 Mhz. Is the only one that can get around the line of sight issues of the tree canopy, but because of the bandwidth available and current interference issues, this frequency does not make a good choice for WISP.

What I am asking the Task Force to consider is a new technology called, "Smart Radio Technology" (SRT) utilizing UHF channels 14 thru 69 471 Mhz. thru 749 Mhz.

Smart Radio technology will eliminate almost all line of sight issues, and prevent interference issues because, SRT when turned on will scan the spectrum for any active channels and will turn those channels off so there will not be any accidental interference with a TV station or another WISP.

Due to the low frequency and tree canopy penetration properties this will make the perfect spectrum for WISP's, for mobile and fixed Point to Multi-Point distribution. WISP would be able to provide the infrastructure needed to provide mobile services to Residential, Businesses, Law Enforcement and Emergency Services.

Smart Radio technology will allow several WISP within a single geographic area, and overall, this new spectrum, should allow sufficient power for effective deployment, as well as flexibility in deployment - requiring certification only of individual components, not entire devices / systems, to allow mix and match between vendors / components to best serve the infinite variety of deployment scenarios.

It will allow for rapid migration from the 2.4 Ghz. to the new spectrum, it will relieve congestion on already crowded Part15 spectrum segments, and will eliminate interference from WLAN's in use by Residential, SOHO, Colleges, Businesses, Schools. This will also allow other devices that do not need long range or tree canopy penetration.

The concepts presented in this response would be the single most effective new tool in existence in enabling industry to provide services. It would also be one of the most significant incentives for developers to produce products specifically designed for working in a regulatory framework designed for one of the most significant leaps forward in communication technology.

It is imperative to the success of this idea, that the regulatory framework be designed to encourage use and re-use of the same spectrum segments within a single area to promote and encourage competition and to prevent monopolization of a market by a single spectrum owner.

This present environment of many small and extremely flexible and creative ventures is the key to its present success and will be the key to any future success of making access as universal as possible. This flexibility has created an environment where markets as small as a city block, or an unincorporated rural community, or as large as a significant portion of a state, can all be served by stable, affordable service provided by a financially sound venture.

This is an idea while not actually addressing the question is close to section 2. b. By using Smart Radio technology, there would not be the need for geographic and frequency boundaries, because the radios will not broadcast were an active channel exist. The registration / Licensing issues of WISP for use in the new spectrum should be an ongoing process, for existing WISP with considerable investment and in the market place for over a year, should pay a yearly fee of \$1,000.00. For a new WISP just getting into the business should pay an initial fee of \$5,000.00 the first year and \$1,000.00 for the following years, to pay for the FCC administrative and licensing services.