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Mutual Data Services, Inc.

February 3, 2003

Federal Communications Commission
445 Twelfth St. SW
Washington, DC 20554

RE: ET Docket 02-380

Commissioners:

Thank you for the opportunity to comment on the question of opening up a lower frequency band for digital data communications, primarily for Internet access. Mutual Data Services is a Broadband Internet Service Provider with our primary delivery using wireless technologies in the unlicensed frequency bands. Our market is 100 % rural and spread over two counties in Central Michigan. In 2002, Mutual Data was approved for a US Department of Agriculture Rural Utilities Service Broadband loan. This funding has allowed us to truly push into the most rural areas of our market.

To make the best use of these funds we chose WaveRider's 900 Mhz equipment. This has helped us deploy service to farms and houses in remote areas. Our use of 2.4 GHz equipment (primarily Cisco and Lucent 802.11b) would have met certain failure due to the tree coverage in these areas. Unfortunately, the 900 MHz band is very crowded with devices that interfere with our deployments. The small amount of frequency available at 900 MHz also makes it difficult to scale to provide high speed access (1megabit/second or faster) to a large number of customers. Currently, we have cellsite designs that are 5 miles in size of smaller due to terrain and foliage issues in these rural areas.

It would be my request to see access in the 700 MHz (or lower) frequency bands with the stated goal of providing rural areas high speed Internet Access. I would also encourage the FCC to place several requirements on anyone that wishes to deploy in this frequency band.

1. Radio equipment must be spectrally efficient allowing competition in an area without causing harm to a deployed system. (An example I can site is the use of a Western Multiplex 2.4 GHz full duplex radio and if improperly deployed will cause other 2.4 ghz radios to stop working.)
2. Users of equipment in the band must have some RF knowledge before they can legally operate any equipment. Possibly certification similar to an "Amateur radio operator" certification. The band must not have hobbyists or experimenters that can cause the band to become polluted. Possibly setting aside a part of the frequency band for experimental units could be established.



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3. Limit maximum cell size to 10-15 miles to promote well designed cells without requiring higher power amplifiers. This would also encourage redundancy in network design vs a "supercell" mentality.

4. Eliminate the "system" certification and replace it with a component certification. Define "professional installed system" certifications.

5. Leave the frequency band for outdoor (last mile delivery) rated products and not allowing indoor LAN products from being designed and certified for use.

Mutual Data Services would eagerly deploy in this new frequency band to supply high speed Internet access in rural America.

Sincerely,

Barry C. Buchholz
President, CEO