



ARCHITECTURE · ENGINEERING · BILLING SERVICES

In the Matter of:

Reallocation of Services Rules for 698 –746 MHz
Spectrum Band (Television Channels 52-59)

GN Docket No. 01-74

Service Rules for the 746-764 and 776-794 MHz
Band, and Revisions of Part 27 of the Commission's
Rules

WT Docket No. 99-168

To: The Commission

RVW Inc., a telecommunications engineering company, strongly supports the petition filed by the Rural Cellular Association and supported by Rural Telecommunications Group seeking modification of the service area size for geographic licenses yet to be auctioned in the Lower and Upper 700 MHz bands on the basis of MSAs and RSAs.

RVW bases its recommendation on experience gained through the process of designing, deploying and assisting small independent telcos in the creation of 700 MHz, advanced wireless broadband systems in rural Nebraska, Kansas, Missouri, Colorado and North Dakota over the past several years.

Back in 2002, the Commission had the foresight to auction the “C Block, Lower 700 MHz Band” in the MSA/RSA format. The stated goal was to put spectrum in the hands of smaller operators and rural telcos who would “use” the spectrum. This is now happening. Equipment is now available for use in the 700 MHz and we are seeing success based on those 2002 auctions. We need to continue moving forward with the 700 MHz auctions in MSA/RSA format for the reasons listed below -

The move to 700 MHz is just beginning – Spectrum needed is already growing.

RVW alone has 7 small telco clients in Nebraska and Kansas who have deployed broadband Internet systems in the 700 MHz, C Block. RVW has many more wireless system trials in place. These systems are rural in nature, providing service to hundreds of customers in many rural counties and small towns - many of these locations has no other options. The current owners of the 700 MHz C Block are utilizing their spectrum to address the rural customers and the underserved town customers left behind by the large RBOCs. RVW believes this is exactly what the Commission had in mind in the original auction. The Commission should continue to encourage more growth in this area.

Licensed 700 MHz is the best spectrum option for quality, wireless rural service provision.

The performance of the 700 MHz spectrum has been superior to other frequencies telcos have deployed in the past. RVW is seeing typical system reach of 5 to 10 miles or more with some signal penetration through foliage. While the 700 MHz equipment costs are comparatively high for the high-quality systems we have been deploying, small independent telcos prefer making investment in licensed spectrum and quality equipment. Unlike “best effort” unlicensed systems available, telcos prefer having control over the quality of service that they provide to customers. The performances of the licensed, 700 MHz systems make deployment of rural wireless deployments economically viable.

The DTV transition is not a real issue in the rural areas.

Interference issues in the rural areas have been negligible. The DTV transition, surely a difficult issue on a national basis, has not been an unmanageable problem in the rural areas where the spectrum is highly attractive for other uses.

Rural areas demonstrate that EAG auctions lend themselves to fallow spectrum.

A commonly encountered situation in rural areas is large blocks of spectrum owned by national companies lying fallow, unused and unavailable in “unattractive” rural areas. RVW would cite 700 MHz D block, 1.670-1.675 GHz block and 2.5 GHz MMDS spectrum as prime examples. There is no way for the rural operators who would use the spectrum to get access to these frequencies – an unfortunate side effect of large block spectrum auctions.

Small spectrum blocks create technical challenges.

In launching rural broadband services utilizing 700 MHz C block spectrum, the most difficult technical challenge to date has been inadequate spectrum available to provide requested amounts of broadband services while avoiding self-interference. Frequency reuse planning is very difficult with such small amounts of spectrum. The addition of the spectrum we are discussing today would greatly alleviate frequency reuse issues and provide enough spectrum to provide more capacity for services in the future.

Conclusion -

For the reasons listed above, RVW supports the petitions seeking modification of the service area sizes for the remaining 700 MHz auctions. Without this modification, the parties who would actually use the spectrum to provide a high quality, ubiquitous rural broadband services will not have a realistic opportunity to economically compete for additional spectrum. As was seen in the earlier auctions, the “large” participants will still participate in the auction by pursuing the MSAs of their choice. Modification of the auction service areas only allows the rural telcos a realistic opportunity to compete for spectrum that they would use – spectrum that would lie fallow in an auction held by EAG.

Respectfully,

/s/

Donn Swedenburg - Wireless Designer

RVW, Inc.