

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Revision of the Commission’s Rules)	CC Docket No. 94-102
To Ensure Compatibility with Enhanced 911)	
Emergency Calling Systems)	
)	
Petition for Waiver)	

**COMMENTS OF ACS WIRELESS
AND PETITION FOR WAIVER**

ACS Wireless, Inc. (“ACSW”) hereby submits comments in support of the Joint Petition for Reconsideration filed by Illinois Valley Cellular RSA 2-I Partnership, Illinois Valley Cellular RSA 2-II Partnership, Illinois Valley Cellular RSA 2-III Partnership, Missouri RSA No. 7 Limited Partnership d/b/a Mid-Missouri Cellular, and Public Service Cellular, Inc. (collectively referred to as “Petitioners”) in CC Docket No. 94-102. Specifically, Petitioners seek reconsideration of the Wireless Telecommunications Bureau’s (“Bureau”) Order issued June 28, 2002, which requires Petitioners, and other similarly situated carriers, to provide a TTY compatible solution for their TDMA networks by December 31, 2003 or to discontinue service over those networks at that time.¹ Petitioners ask that this mandate be reconsidered to allow Petitioners and other carriers to continue to operate non-TTY compliant TDMA networks beyond December 31, 2003 because the continued availability of TDMA-based digital services is in the public interest in certain circumstances.

¹ *In the Matter of Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Order* (rel. June 28, 2002) (“Order”) at ¶ 22.

ACSW concurs fully with Petitioners and respectfully asks the Bureau to reconsider its Order. In addition, in the event the Bureau does not reconsider its decision, ACSW, pursuant to 47 C.F.R. §§ 1.3 and 1.925, requests a waiver of the TTY Access to 911 Services Rules set forth in 47 C.F.R. § 20.18(c), as modified by the Bureau, because of special circumstances which exist in ACSW's network that impose a disproportionate burden on ACSW if it were required to comply with the mandate.

I. COMMENTS IN SUPPORT OF RECONSIDERATION

Petitioners are not seeking a complete reconsideration of the mandate to provide TTY-compatible digital networks by December 31, 2003. Rather, Petitioners seek only to have the mandate, as it relates to a carrier's TDMA system, reconsidered. ACSW concurs with Petitioners that the continued operation of TDMA networks under certain circumstances is in the public interest. Further, ACSW concurs with Petitioners that it is unlikely that TDMA compatible solutions will continue to be commercially available to and desired by TTY users, making these solutions less practical and reliable, particularly in rural areas.

Petitioners and ACSW are committed to providing TTY users access to digital wireless service. Petitioners, like ACSW, are all in the process of building out and migrating their customers to a new digital CDMA platform. Unlike TDMA, which is being phased-out as a network platform, CDMA technology is expected to provide the enhanced capabilities and services that customers expect into the future. Petitioners point out that their TTY customers will have access to digital service on these new CDMA networks from the date of their deployment. As a result, the Commission's mandate that digital services be accessible to TTY users will have been satisfied once their CDMA networks are operational. As Petitioners note, any additional mandate for duplicative or underlying TDMA systems, on balance, is not in the

public interest where carriers are deploying CDMA and would have to devote scarce resources to upgrade systems that are being phased out.

If carriers continue to operate TDMA systems on a transitional basis, TTY users will not be denied digital service. TTY users desiring digital service would simply be migrated to the CDMA network. Further, TDMA roamers that wish to utilize a TTY-compatible phone would not be denied service either. Such users would be able to operate their handsets in analog mode. Therefore, continued operation of a TDMA system would not result in less digital service or no service, whatsoever, being available to TTY users.

In its Order, the Bureau concludes that, because both TDMA handsets and infrastructure upgrades are currently available, there is no overarching technological reason why a TTY solution could not be implemented in TDMA systems by December 31, 2003.² ACSW shares the concerns of Petitioners that, although some compliant handsets may currently be on the market, they may not continue to be commercially developed, particularly for smaller and rural carriers, given that the entire industry is migrating away from TDMA technology. In recent years, the only major carriers to offer service on a TDMA platform were AT&T Wireless and Cingular. Both of these carriers are well into the process of “overlying” their systems with GSM technology, with the intent to migrate customers off the TDMA systems. Prior to this migration, the phone vendors developed their product for GSM as a first priority, CDMA, second and TDMA, third. As ACSW has continued to offer products on its TDMA system, it has seen the availability of TDMA products dwindle. ACSW, like Petitioners, is also concerned that any currently available compliant handsets will not enjoy significant or sustained consumer approval since they rely on soon to be out-dated technology.

² Order at ¶ 22.

Further, the availability of handsets is not the only consideration. Handsets must be deployed in connection with cost-intensive switch upgrades, described below, so that the information transmitted from a TTY-compatible TDMA handset can be received and processed. Therefore, other necessary upgrades may be disproportionately burdensome to implement in the future as TDMA is phased-out for small rural carriers with small subscriber bases, like Petitioners and ACSW.

For these reasons, ACSW supports Petitioners' Petition for Reconsideration and respectfully asks the Bureau to reconsider its TDMA mandate for these circumstances.

II. PETITION FOR WAIVER

In the event that the Bureau does not reconsider and extend its December 31, 2003 deadline generally as requested by Petitioners and ACSW herein, ACSW respectfully requests a further individual waiver of the TTY Access to 911 Services Rules set forth in 47 C.F.R. § 20.18(c).

ACSW seeks a waiver to permit it to provide TTY users access to digital service in the most populated area of the state, to at least Anchorage/Eagle River (approximately 300,000 in population) through CDMA by the December 31, 2003 deadline and to maintain the current level of analog access for TTY users in the remainder of the state until it completes its transition to CDMA. ACSW plans to build out its CDMA network generally to Fairbanks, Juneau, Kenai, Seward, Soldotna, and Homer (approximately 168,000 total in population) by December 2004, and to the North Slope, Tok and Ketchikan by December 2005 (approximately 25,000 total in population). At that point, its CDMA network will be largely complete. ACSW will fill in along the highways between population centers through December 2007. It will provide the same level

of TTY service to TDMA subscribers that they are currently receiving (through analog) for this entire transition period.

This solution takes into account the unique characteristics of the Alaska market and ACSW's network. It minimizes the disparate burden that ACSW faces to comply with the TTY mandate for a network that ACSW is planning to decommission in large part over the next two years. Also, it permits ACSW to continue with its plan to add certain cell sites in unserved and underserved areas over this period.

ACSW is a small regional carrier that provides wireless service to the majority of the populated areas in Alaska, which are generally spread out across very large distances. It offers a vast in-state service calling area with coverage in Alaska's few most densely populated cities and numerous smaller communities. ACSW's network extends from Ketchikan in the Southeast to Barrow and Deadhorse on the North Slope and to Homer in Southcentral, an area of approximately 325,000 square miles.³ Thus, the ACSW network spans an enormous area encompassing coastal areas, mountain ranges, rainforest, glaciers, and tundra, all with different climates, geography, and demographics. Further, the state is very sparsely settled with small villages and communities spread often many hundreds of miles apart, which are, in many cases, inaccessible by road.

Many of ACSW's cell sites are deployed on mountaintops or in other extremely rural and remote locations, which makes ACSW's costs of maintaining its network much higher than for its more urban counterparts. The costs of complying with the TTY/TDMA mandate are disproportionately high for ACSW. The TTY/TDMA mandate will lead to service trade offs for Alaska's most rural wireless consumers that are not in the public interest.

³ ACSW's service is not continuously available throughout this entire area.

ACSW is deploying a CDMA network throughout its three markets. ACSW has already begun its conversion to a CDMA network in Anchorage and the surrounding communities, which constitute more than one-half of the state's population. ACSW's CDMA system is planned to be in operation throughout Anchorage/Eagle River by the second quarter of 2003. Consequently, the majority of ACSW's subscribers as well as the majority of the state's population will have access to digital TTY services by December 2003. Thus, Congress' goal for TTY users will be substantially achieved in ACSW's network in Alaska by the Bureau deadline.

The Bureau's mandate would negatively impact service to ACSW's remaining subscribers who are served primarily by ACSW's Fairbanks and Juneau switches. The financial burden on ACSW to upgrade these switches by December 31, 2003 with software compatible with TTY is disproportionately high. It will cost ACSW approximately \$17 per subscriber to install the TTY-related software on ACSW's Fairbanks and Juneau switches.⁴ The burden on ACSW is disparate because it does not have the same resources or the same large subscriber base as other carriers over which it can spread the cost of complying with the multiple mandates it must fulfill in the next few years.⁵

In fact, no other wireless carrier in Alaska will face such disproportionately high costs because no other wireless carrier has a network like ACSW's that extends service into so many

⁴ Further, the foregoing estimate only accounts for the actual cost of the software and does not account for installation and maintenance costs, which would further increase ACSW's expenses of implementing a TTY solution for its TDMA network.

⁵ These mandates include CALEA, TTY, E911, Number Pooling, and LNP. Conservative estimates indicate that ACSW will need to make more than \$9 million in capital expenditures to satisfy all of these mandates or more than \$112 per subscriber. But, for the last three years, ACSW's TDMA capital expenditures have been only \$7.96 million per year.

of Alaska's most rural and remote communities.⁶ For example, AT&T Wireless, ACSW's primary competitor, has only one switch in Alaska that would need modification. Therefore, AT&T Wireless' cost for its subscribers of any modification is proportionately smaller. AT&T Wireless serves primarily in the Southcentral portion of the state. Moreover, AT&T Wireless has a much larger capital budget and national subscriber base on which it can rely to subsidize any capital outlays.⁷

Upgrading multiple switches is a major endeavor for ACSW that will detract from its ability to provide service, particularly in remote and underserved areas. In order to comply with the Bureau's mandate, ACSW faces two difficult service trade-offs. ACSW will have to forego opportunities to add cell sites in remote areas not previously served, thereby denying rural communities needed wireless services.⁸ Or, alternatively, ACSW will be forced to reduce the planned CDMA technology upgrade and enhancement to the services it currently offers subscribers. Neither of these trade offs is in the public interest.

Under ACSW's plan, the limited TTY users not served by CDMA will experience no change in service levels. These TTY users will maintain the same level of analog access that they currently have. ACSW is committed to maintain analog service in areas where it has not yet deployed CDMA technology, even beyond the Commission's phase-out deadline. Thus, the

⁶ ACSW serves numerous communities which have under 1000 in population, including Dot Lake, Fort Greely, Kake, Big Delta, and Cooper Landing.

⁷ In contrast, ACSW's TDMA capital budget for the last three years has averaged \$7.96 million.

⁸ The cost of implementing an infrastructure modification to its two switches is roughly equal to ACSW's cost to deploy three additional cell towers in currently unserved or underserved rural communities.

TTY users will receive the same level of service during ACSW's phased transition to CDMA. Access to digital service will only be delayed.⁹

Further, this plan is in the public interest because of the very few TTY users in ACSW's service areas. ACSW has very minimal TTY traffic on its system now. Therefore, the mandate's benefits are very limited compared to its costs, both in service level provided and trade-offs for underserved areas.

As ACSW noted in its original petition for waiver, in certain circumstances, for instance where technology-related issues or other exceptional circumstances arise, the Commission may waive its rules.¹⁰ Generally, the Commission's rules may be waived for good cause shown.¹¹ Further, waiver is appropriate if special circumstances warrant a deviation from the rules and such a deviation will serve the public interest.¹² Special circumstances include unusual factual circumstances that make application of the rule(s) inequitable or unduly burdensome.¹³

The Commission has recognized the burdens imposed by multiple regulatory mandates on rural carriers. For example, in this proceeding, the Commission has recognized that rural or smaller carriers may have difficulty deploying TTY compatible TDMA technologies.¹⁴ In other proceedings, like E911, the Commission has noted that the cost of upgrades, combined with the relatively low number and density of customers in rural areas, could impose high per customer

⁹ In some very limited remote areas, depending on future determinations of cost, need or feasibility, ACSW may retain some TDMA service for its subscribers.

¹⁰ See generally AT&T Petition for Waiver and *In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Fourth Memorandum Opinion and Order*, 15 FCC Rcd. 17442 (2000), at ¶ 43 (citing *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990)) (other citations omitted).

¹¹ *Id.*; see also 47 C.F.R. § 1.3.

¹² *Id.*

¹³ See 47 C.F.R. § 1.925(b)(3)(ii).

¹⁴ Order at ¶ 22.

costs in rural areas.¹⁵ The rate and extent of deployment, reliability, encouragement of further improvements, and cost are other relevant factors to consider.¹⁶

All of these considerations support granting ACSW a limited waiver of the TTY rules. ACSW establishes herein that special circumstances exist to justify a waiver of the December 31, 2003 deadline for its TDMA network. Further, because the TTY/TDMA mandate harms ACSW's ability to expand and enhance service to remote and underserved subscribers, a waiver for ACSW is in the public interest.

III. CONCLUSION

Based on the foregoing, ACSW supports Petitioners' request that the Bureau reconsider its June 28, 2002 Order. In addition, ACSW presents special circumstances that demonstrate good cause to grant it a waiver of the December 31, 2003 deadline. For the foregoing reasons, ACSW respectfully requests that the Bureau reconsider its mandate that carriers make their TDMA networks TTY compliant by December 31, 2003 or grant its waiver request, based on its own unique operating circumstances.

Respectfully submitted on this 26th day of September 2002.

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¹⁵ *In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Calling Systems*, CC Docket No. 94-102, *Third Report and Order*, 14 FCC Rcd 17388 (1999), at ¶ 28.

¹⁶ *Id.*