

**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)	

**ACS WIRELESS PETITION FOR
WAIVER OF 47 C.F.R. § 20.18(c)**

ACS Wireless, Inc. (“ACSW”), pursuant to 47 C.F.R. § 1.3 and § 1.925, hereby requests a waiver of the TTY Access to 911 Services Rules of the Federal Communications Commission (“Commission”) set forth in 47 C.F.R. § 20.18(c) (“TTY rules”) for its Time Division Multiple Access (“TDMA”) network only.¹ ACSW is a small regional wireless carrier serving Alaska and currently provides wireless telecommunications over a TDMA and Advanced Mobile Phone Service (“AMPS”) network. ACSW is currently in the process of deploying a Code Division Multiple Access (“CDMA”) network to comply with the build out requirements for its three PCS licenses. ACSW intends to use reasonable efforts to migrate all of its present customers to the improved CDMA technology and phase out the use of its other equipment to the extent possible.

The cost associated with deploying TTY-compatible software in both of these networks simultaneously is prohibitive for a small rural carrier like ACSW, particularly in connection with the other regulatory mandates with which ACSW must comply and the high costs associated with providing service to its largely rural customers. Because it has very limited resources,

¹ See, In the Matter of Revision of the Commission’s Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems, *Fourth Report and Order*, CC Docket No. 94-102, 15 FCC Rcd 25216 (December 28, 2000) (“*Fourth Report and Order*”).

ACSW does not have the ability to satisfy the multiple regulatory requirements imposed on it and still maintain the high quality and diverse services it offers its customers or to expand its service offerings.

Further, in light of industry indications that TDMA is not likely to be a sustainable technology in the future, the availability of TTY-compatible TDMA handset equipment is compromised. Accordingly, even if cost were not an issue, ACSW would face extreme difficulties in obtaining the equipment necessary for its TDMA TTY users to place 911 calls. For these reasons, there is good cause to grant ACSW a waiver for the TTY rules for its TDMA network and a waiver is in the public interest.

I. STANDARD FOR GRANTING WAIVER

Under the Communications Act, the Commission must promote the safety of life and property through the use of wire and radio communications.² This mandate has been enhanced by the enactment of the Wireless Communications and Public Safety Act of 1999.³ The purpose of the 911 Act is to enhance public safety by encouraging and facilitating the prompt deployment of a nationwide, seamless communications infrastructure for emergency services that includes wireless communications.⁴

In furtherance of this mandate, the Commission promulgated rules for the transmission of 911 calls made from TTY devices to ensure that individuals with speech or hearing disabilities could make wireless 911 calls through means other than conventional mobile radio sets.⁵ Since, the mandate was first enacted, the ability to fulfill the spirit of the mandate and the letter of the

² See Section 1 of the Communications Act, 47 U.S.C. § 151.

³ Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, enacted Oct. 26, 1999 (“911 Act”).

⁴ *Id.*

⁵ See 47 C.F.R. § 20.18(c).

Commission's TTY rules has been frustrated by a lack of wireless technology that is capable of reliably transmitting the Baudot-encoded audio tones produced by TTY devices.⁶ In the past, in recognition of these obstacles to transmitting 911 TTY calls, the Commission granted carriers temporary waivers of its TTY rules.⁷

In the *Fourth Report and Order*, responding to advances in wireless technologies, the Commission generally reimposed the 911 TTY mandate on wireless carriers and established two deadlines for the transmission of 911 calls made from TTY devices. First, wireless carriers were to have obtained all software upgrades and equipment necessary to make their systems capable of transmitting such calls by December 31, 2001.⁸ Second, wireless carriers must integrate, test and deploy 911 TTY technology in their systems in conjunction with the public safety community by June 30, 2002.⁹

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

⁶ See *Fourth Report and Order* ¶ 3

⁷ *Id.*

⁸ *Id.* at ¶ 8. The *Fourth Report and Order* also established quarterly reporting requirements for wireless carriers. ACSW filed the required quarterly reports with the Commission. See *Fourth Report and Order*, ¶ 15.

⁹ *Id.*

¹⁰ See *Fourth Memorandum Opinion and Order*, ¶ 43.

¹¹ *Id.*; see also 47 C.F.R. § 1.3.

¹² *Id.*

¹³ See 47 C.F.R. § 1.925(b)(3)(ii).

The Commission has recognized the burdens imposed by multiple regulatory mandates on rural carriers. For example, in the context of the E911 initiative, the Commission has implicitly recognized that rural or smaller carriers may have difficulty deploying location technologies.¹⁴ The Commission noted that the cost of upgrades, combined with the relatively low number and density of customers in rural areas, could impose high per customer 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 and additional issues set forth in detail below, support granting ACSW a limited waiver of the TTY rules. ACSW establishes herein that special circumstances exist to justify a waiver of the Commission's June 30, 2002 deadline for its TDMA network. Moreover, ACSW establishes that this waiver is in the public interest.

II. ACSW'S NETWORK

ACSW is a small regional carrier that provides wireless service over a TDMA and AMPS network. ACSW provides service to the majority of the populated areas in Alaska, which are generally spread out across very large distances. As a result, ACSW's wireless network must span vast areas. In many cases, 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.

ACSW presently holds three PCS licenses, which, when combined, cover the entire state of Alaska. ACSW's five-year build out date for these three licenses is April 28, 2002. ACSW

¹⁴ Revision of the Commissions Rule to Ensure Compatibility with Enhanced 911 Calling Systems, CC Docket No. 94-102, *Third Report and Order*, 14 FCC Rcd 17388 (1999) ("*Third Report and Order*"), ¶ 28.

¹⁵ *Id.*

¹⁶ *Id.*

has selected Code Division Multiple Access technology (“CDMA”) for this network because this technology has significant advantages for ACSW subscribers, including high speed Internet access and accurate location services.

Until very recently, ACSW was engaged in negotiations with a number of vendors for the purchase of necessary CDMA network equipment.¹⁷ ACSW is in the process of deploying this technology throughout its licensed frequencies.¹⁸ ACSW intends to use reasonable efforts to migrate all of its existing customers to this advanced system by 2007 to the extent feasible.¹⁹

III. THERE IS GOOD CAUSE TO GRANT ACSW A WAIVER OF THE TTY RULES FOR ITS TDMA NETWORK AND A WAIVER IS IN THE PUBLIC INTEREST.

As noted above, ACSW is currently in the process of deploying a CDMA network to supplant, to the extent feasible, its TDMA network. ACSW selected CDMA technology because of its superior technological capabilities. CDMA technology will enable ACSW to expand and enhance the services available to and extremely valuable for Alaska consumers, like high speed Internet access. Due to the vastness of and dispersed population of Alaska, deployment of this network is a particularly costly initiative for ACSW, though ACSW views this upgrade as a key step in its mission to serve and connect Alaska consumers.

ACSW plans to deploy 911 TTY technology in its new network at the same time as it brings its CDMA services on line. ACSW fully anticipates that its CDMA network will be in operation by April 28, 2002, in compliance with its build out requirements. So as not to leave

¹⁷ The uncertainty regarding the vendor of its technology and the price to be paid made ACSW unable to comply with the Commission’s December 31, 2001 purchasing deadline. ACSW did submit quarterly reports of its progress to the Commission as required. Accordingly, a retroactive waiver of the Commission’s December 30, 2001 deadline is justified.

¹⁸ ACSW set forth its deployment plan in detail in its ACS Wireless *Petition for Limited Waiver* filed November 30, 2001.

any customer without service, ACSW plans to continue to operate its TDMA network until its CDMA network is fully deployed. Consequently, for a period of at least five years, ACSW will be required to operate and maintain two wireless networks, which utilize different operating platforms and equipment. For a small rural carrier like ACSW, this endeavor, though imperative for continuity of service reasons, is extremely expensive.

ACSW has only recently secured a vendor for its CDMA technology. Based on its purchase of CDMA equipment, it has become clear to ACSW that the cost associated with deploying TTY-compatible software in both of its CDMA and TDMA networks simultaneously is prohibitive for ACSW. Among other reasons, the very high costs associated with providing service to its largely rural customers and of maintaining its vast, remote network make the strain on ACSW's resources, of TTY compliance in both networks, too great.

Moreover, in connection with the other regulatory mandates with which ACSW must comply, like E911 Phase II, CALEA, Thousand Number Block Pooling and Local Number Portability, ACSW is facing extensive additional capital outlay expenses in the near term. ACSW has very limited resources and does not have a large consumer base to offset these expenses. Accordingly, ACSW does not have the ability to satisfy the multiple regulatory requirements imposed on it and still maintain the high quality and diverse services it offers its customers or to expand its service offerings. ACSW would necessarily have to make service trade-offs that are not in the public interest, such as not adding cell sites in unserved or underserved areas in order to make its TDMA network 911 TTY compatible.

¹⁹ In some areas, ACSW may, depending on future determinations of cost, need, or feasibility, retain some TDMA and/or analog service for its subscribers. ACSW will maintain analog service to the extent required by the Commission's rules and its subscribers needs.

Even in the absence of ACSW's CDMA build out, its ability to deploy technology capable of transmitting 911 TTY calls made across a TDMA network is uncertain at best. In light of the decision of the only major carriers with TDMA technology currently in place to discontinue using this technology, TDMA technology is not likely to continue to be a long-term viable or supportable technology option for any wireless carriers, especially a small rural carrier like ACSW.

Further, it is presently unclear whether there will even be TDMA TTY-compatible handsets made commercially available.²⁰ Very simply, manufacturers do not invest in dying technologies. Rather, they look ahead and redirect their resources to the more profitable and innovative technologies on the horizon.

As ACSW's quarterly reports indicate, ACSW's ability to satisfy the TTY rules is largely dependent on its ability to access enhanced TTY-compatible TDMA handsets. At this point, however, the required level of manufacturer commitment to enhanced TDMA handsets no longer appears to be likely. Therefore, circumstances outside the control of ACSW make it unlikely that ACSW will be able to comply with the Commission's TTY rules in its TDMA network. Because of the likelihood that TDMA technology and equipment will not be available (certainly not over the long term), it is not in the public interest to impose a TDMA 911 TTY requirement on ACSW.²¹

In addition, while ACSW customers will soon have the choice of CDMA technology for their wireless TTY needs, they will also continue to have the option of using analog technology

²⁰ As Enterprise Wireless PCS, LLC points out in its request for a waiver, in light of the well publicized move away from TDMA technology, it is even more unlikely that a consumer in need of a TTY-compatible digital phone would select a TDMA based phone. Therefore, the real need for this type of device may be nonexistent.

for their 911 TTY calls. Therefore, if the TTY rules are waived for ACSW's TDMA network, customers with TTY devices will still have options for their 911 calls. Accordingly, a waiver will not harm these customers.

IV. CONCLUSION

Based on the foregoing, ACSW presents special circumstances justifying a waiver. ACSW respectfully submits that there is good cause shown to grant it a waiver of the December 31, 2001 deadline, retroactively, and the June 30, 2002 deadline for operators of digital wireless systems to be capable of transmitting 911 calls made using TTY devices for its TDMA network. Further, ACSW respectfully submits that a waiver is in the public interest. For the foregoing reasons, ACSW respectfully requests that the Commission grant its waiver request.

Respectfully submitted on this 18th day of April, 2002.

ACS Wireless, Inc.

By:
Elisabeth H. Ross
Allison M. Ellis
Birch Horton Bittner & Cherot
1155 Connecticut Avenue, N.W.
Suite 1200
Washington, D.C. 20036
(202) 659-5800
(202) 659-1027 (Facsimile)

Counsel for ACS Wireless, Inc.

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²¹ Such action may even cause consumers to make costly mistakes in selecting and purchasing TTY-compatible wireless devices, which is not in the public interest either.