

NORTH DAKOTA NETWORK COMPANY  
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July 15, 2002

Marlene H. Dortch, Secretary  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Room TW-A325  
Washington, D.C. 20554

**Re: CC Docket No. 94-102**  
**Quarterly TTY Implementation Report**  
**BTA299 D - Minot, ND**  
**BTA299F - Minot, ND**

Dear Ms. Dortch:

North Dakota Network Co. ("NDNC") hereby submits its quarterly report on implementation of Text Telephone Device ("TTY") access to 911 over its digital wireless network, pursuant to the Commission's *Fourth Report and Order* in CC Docket No. 94-102, *released* December 14, 2000.

NDNC is using Nortel CDMA base stations and switching equipment in its network. Thus, NDNC is dependent on Nortel for the provision and installation of the equipment and software necessary to allow NDNC's digital wireless network to process 911 calls originating from TTY devices. Nortel's sales representative has informed NDNC that its current Nortel DMS-100 Dual Load, Wireless on Wireline switch would not be upgraded or supported further and that NDNC would be required to change from the current switch configuration to a new switch. Apparently, Nortel has made a business decision, based on the market demand for the DMS-100 Dual Load Wireless on Wireline product, that LWW007 (the equivalent to wireless MTX 9) would be the last DMS-100 Dual Load Wireless on Wireline software load. Now, NDNC must transition its infrastructure to separate wireline/wireless switching platforms, and load one of them with the wireless load MTX10, which is the software that will provide the TTY function to NDNC's system. NDNC must buy a new switch, convert its current switch to wireline-only traffic and load the additional software.

It is NDNC's understanding that Nortel initially agreed to pay the cost of the new switch. However, during the last quarter of 2001, Nortel retracted that offer. NDNC immediately entered into negotiations regarding the price of the new switch with Nortel, and when mutually agreeable terms were reached, NDNC placed an order for the equipment. That order was

submitted on February 14, 2002. The purchase of a new switch represents a significant capital investment for a small business.

NDNC has completed the first of two software upgrades necessary to achieve TTY compliance. The second upgrade cannot be begun until the switch is split and the new switch installed. However, before it can install the new switch, NDNC must modify its physical plant to accommodate the second switch. NDNC is converting some space that is currently used for storage and adding it to the switch room. This conversion requires that a wall between the two rooms be removed, that an additional halon fire protection system be installed and that the cooling unit be replaced in favor of a larger one that can accommodate the heat generated by the additional switch. This is a major undertaking for NDNC.

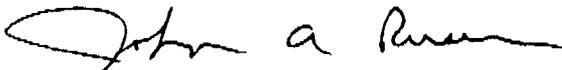
NDNC is a small carrier serving a rural area, and lacks any influence over the research and development activities of its equipment vendors. We understand that Nortel will be providing information about TTY compatibility of their CDMA equipment in their quarterly update filing through the TTY Forum.

In its Fourth Quarterly Report, NDNC noted that, despite its best efforts, it was not able to meet the December 31, 2001 deadline by which carriers operating digital wireless systems should have obtained all software upgrades and equipment necessary to make their systems capable of transmitting 911 calls from TTY devices, as specified in the *Fourth Report and Order*. Therefore, to the extent necessary, it requested a waiver of the December 31, 2001 requirement.

On June 28, 2002, NDNC requested a six month waiver of the June 30, 2002 deadline by which digital wireless systems must be capable of transmitting 911 calls from TTY devices. Despite the fact that it placed an order for the necessary switch as early as February 14, 2002, that switch has not yet been delivered. In addition, NDNC is completing some modifications to its physical plant that must be performed to accommodate the new switch. NDNC is well on the road to compliance, however, it requested and requires approximately six months beyond the Commission's contemplated completion date to finish its implementation.

NDNC is aware that only one of the three Public Safety Answering Points ("PSAPs") in its area is even working toward E911 Phase II compliance. The Minot, North Dakota PSAP has recently secured the necessary funding for the upgrade, however NDNC estimates that it will be at least a year before the PSAP's upgrades have been completed. NDNC is providing Phase I service through this PSAP. The other two PSAPs in NDNC's territory are currently working toward Phase I service with the local analog cellular operators. To the best of NDNC's knowledge, these two PSAPs have no current plans to install Phase II capability.

Sincerely,



John A. Reiser  
Chief Operations Officer  
North Dakota Network Co.

**North Dakota Network Co.  
E911 TTY Device Capability Report as of March 31, 2002**

**Development Activities**

1. **Network Infrastructure Software Development** – We continue to be in discussions with our network vendor, Nortel. They have indicated that TTY compatible software will be in the MTX 10.0 software load. This software load cannot be installed until the current switch is split and a new switch installed.
2. **Handset Development and Testing Plans** – Our handset vendors continue to work on the development of a TTY capable handset. Nokia has informed us that it has developed a handset, model 6370, that should become available mid-May 2002. Nokia has another model, 6385, that will become available July 2002 and a third, model 3585, that would be available late September 2002. In approximately Motorola will begin manufacturing phones that have a software upgrade to make them TTY compatible. We will evaluate these phones when they become available.
3. **Beta Testing and Lab Testing** – NDNC is a small rural carrier, and is looking to its equipment manufacturers to conduct full beta and lab testing of network software, handsets and infrastructure equipment. However, NDNC will test the equipment it procures as soon as it is available, to make sure it meets the manufacturer's specifications.
4. **Release and General Availability to Carriers of Network Infrastructure Software** – Unable to determine a firm date at this time with any manufacturer or vendor.
5. **Availability to Carriers of Full Digital Acceptance Test Units** – Unable to determine a firm date at this time with any manufacturer or vendor.
6. **Efforts Toward Achieving Digital Wireless Solution Compatibility with Enhanced TTY** – NDNC continues to pressure its network and handset vendors to provide it with TTY compliant hardware and software. NDNC must purchase and install a new switch to become TTY capable. The order for that switch has been placed and NDNC is awaiting its delivery. NDNC has completed the first of two software upgrades necessary to achieve TTY compliance. The second upgrade cannot be begun until the switch is split and the new switch installed. NDNC is in the process of modifying its physical plant to accommodate the second switch. NDNC is converting some space that is currently used for storage and adding it to the switch room. This conversion requires that a wall between the two rooms be removed, that an additional halon fire protection system be installed and that the cooling unit be replaced in favor of a larger one that can accommodate the heat generated by the additional switch.

### **Testing and Deployment Activities**

- 7. Carrier Coordination of Testing with PSAP** – NDNC will test with the PSAPs in the areas where this service will be deployed. Any coordination with the PSAP will be done on a case-by-case basis, in cooperation with the relevant PSAP personnel.
- 8. Carrier Testing Activities, Including Field Testing, Consumer and End-to-End Testing, and Other Necessary Tests** – Each of these will be tested once equipment, software availability, deployment, installation, and turn up are completed.
- 9. Retail Availability of Necessary Consumer Equipment** – NDNC is unable to determine the retail availability of consumer equipment, as none of the handset manufacturers has been able to release a date for general availability. However, as indicated above, at least two major manufacturers have indicated that they are moving toward handset availability by mid-2002.
- 10. Geographic Scope of Network Infrastructure Development** – Since our network has only one switch, as hardware becomes available, it will be deployed across our whole network. Likewise, as TTY compliant handsets become available we will offer them in all retail locations.