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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

December 12, 2000

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
12th Street Lobby B TW-A325
Washington, D.C. 20554

EX PARTE OR LATE FILED

Re: Ex Parte Communications in WT Docket 96-86

Dear Ms. Salas:

On December 12, 2000, Tapio Heikkila, Vice President, Nokia and Leo Fitzsimon, Director, Nokia, accompanied by Lawrence R. Sidman, David R. Siddall and John M.R. Kneuer of Verner, Liipfert, Bernhard, McPherson & Hand, met separately with: Commissioner Michael K. Powell and his Senior Legal Advisor, Peter A. Tenhula; Bryan Tramont, Legal Advisor to Commissioner Harold Furchtgott-Roth; Adam Krinsky, Legal Advisor to Commissioner Gloria Tristani; and briefly with Robert M. Pepper, Chief, Office of Plans and Policy. We discussed issues addressed in the above referenced proceeding. The substantive discussion during these meetings is reflected in the Comments and Reply Comments filed by Nokia in this proceeding. The attached summary of Nokia's positions and timeline were distributed.

In accordance with Section 1.1206 of the Commission's Rules, 47 C.F.R. §1.1206, an original and one copy of this letter, including attachments, are being filed with your office. Please direct any questions concerning this matter to the undersigned.

Respectfully submitted,

David R. Siddall

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Attachment

cc: Commissioner Michael K. Powell
Peter A. Tenhula
Bryan Tramont

Adam Krinsky
Robert M. Pepper

NOKIA

700 MHz Public Safety Band Key Considerations

I. **Nationwide Interoperability Standardization and General Use Channel Efficiency Standards are Inextricably Intertwined.**

- **The Commission can achieve nationwide interoperability and achieve 6.25 kHz voice channel efficiency** by (a) adopting Project 25 Phase I ("Phase I") for the interoperability channels and (b) mandating 6.25 kHz efficiency on the general use channels.
- **Manufacturers need to know both the general use efficiency requirements and the interoperability standard** when defining product development plans. By deciding these issues together, the Commission will define the critical technical parameters that manufacturers require to rapidly introduce equipment for the 700 MHz band.

II. **The Commission Should Mandate 6.25 kHz Efficiency on the General Use Channels.**

- **Unless the Commission mandates 6.25 kHz efficiency on the general use channels, it will be far more difficult to migrate to 6.25 kHz technology in the future.** There is no easy and low-cost solution for migrating from 12.5 kHz to 6.25 kHz at the system level. The costs involved in such a transition are significant and would create a serious barrier to migrating to 6.25 kHz technology for most public safety agencies.
- **Mandating 6.25 kHz efficiency in the general use channels will not delay the introduction of equipment in the 700 MHz band.** The 700 MHz band is new in the U.S., and not allocated for any mobile radio use anywhere else in the world. Today, no manufacturers produce 700 MHz public safety equipment. All manufacturers will need time to modify their base station and terminal offerings to operate in the 700 MHz band.
- **Multiple technologies are suitable for public safety use which achieve 6.25 kHz channel efficiency.** Competing 6.25 kHz technologies include 2-slot TDMA, 4-slot TDMA, and 6.25 kHz FDMA. Even more efficient technologies are becoming available such as DCMA, which has been demonstrated by Comspace and achieves 3.125 kHz voice channel efficiency.
- **6.25 kHz equipment is used by public safety agencies in many other countries and is meeting these users' technical and operational requirements.** This same equipment could readily meet the needs of public safety users in the U.S. in all operating environments: urban, suburban and rural. In addition, 6.25 kHz handheld units that provide battery life of 12-14 hours in normal public safety duty cycles already are in use.

III. A Reasonable Transition Period Before Phase I Becomes Mandatory is Essential and Will Not Delay Interoperability.

- **Manufacturers will need time to modify their base station and terminal offerings to operate in the 700 MHz band.** In addition, manufacturers of equipment designed to operate at 6.25 kHz efficiency in the general use channels will need a reasonable transition period in which to integrate Phase I functionality into their products.
- **Interoperability in the 700 MHz band will only be necessary after incumbent TV operators vacate the band and two systems with different technology are deployed in the same geographic region.** Given the years needed to plan and implement public safety radio systems and the fact that the DTV transition will not be complete until 2006 at the earliest (and 2010 more likely), it is unlikely that any two such systems will be deployed in less than six to nine years. Accordingly, granting a reasonable transition period before Phase I capability is mandatory will not delay the availability of interoperability, and will accelerate the availability of spectrally efficient equipment for general use.

IV. There is a critical need to ensure competition in the 700 MHz equipment market.

- **By mandating 6.25 kHz on the general use channels the Commission will ensure a vibrant competitive equipment market for the 700 MHz band.** There are multiple competing 6.25 kHz technologies suitable for general use. While there is only one supplier of Phase I 12.5 kHz trunked infrastructure equipment, and there is no promise that any other supplier will emerge in the future. Allowing Phase I to dominate the 700 MHz band will perpetuate a monopolistic environment, denying public safety agencies the improved services and cost savings that a competitive environment will foster.

Timeline for Meeting Public Safety Radio Equipment Requirements at 700 MHz

Public Agency process

