

# NOKIA

1101 Connecticut Ave. N.W., Suite 910, Washington, D.C. 20036

August 28, 2000

Ms. Magalie Roman Salas  
Office of the Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
12<sup>th</sup> Street Lobby, TW-A325  
Washington, DC 20554

RECEIVED  
AUG 28 2000  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Re: Comments in DA 00-1673, Comment Invited on Third Generation Wireless/IMT-2000  
Petitions (RM-9911 and RM-9920)

Dear Ms. Salas:

Enclosed please find an original and four copies of Nokia's comments in response to the Commission's Public Notice in the above-captioned proceeding. Also enclosed is a duplicate copy to be date stamped and returned. If you should have any questions or need further information, please do not hesitate to contact me at (202) 887-5210.

Sincerely,



Cecily A. Cohen  
Manager, Government and Industry Affairs  
Nokia Inc.

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Comment Invited on Third Generation ) RM-9991 & RM-9920  
Wireless/IMT-2000 Petitions )  
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**COMMENTS OF NOKIA, INC.**

Nokia Inc. (“Nokia”) hereby comments on the Commission’s *Public Notice* inviting comments on Third Generation Wireless (“3G”)/IMT-2000 Petitions (RM-9911 and RM-9920)<sup>1</sup>, in particular the petition filed by the Cellular Telecommunications Industry Association (CTIA) (“CTIA petition”), requesting that the Commission initiate a rulemaking proceeding to designate additional spectrum for 3G wireless services in a manner consistent with the International Mobile Telecommunications 2000 (“IMT-2000”) decisions recently made at the 2000 World Radiocommunication Conference (“WRC-2000”).

Nokia is a global company with over 56,000 employees with key growth areas in wireless and wireline telecommunications. As a pioneer in mobile telephony, Nokia is the world’s leading mobile phone supplier as well as a top supplier of mobile and fixed telecom networks and services.

**I. INTRODUCTION**

Nokia fully supports the CTIA petition requesting that the Commission initiate a rulemaking proceeding to designate additional spectrum for 3G wireless services in a manner consistent with the decisions recently adopted at the International Telecommunication Union (ITU).

As noted in the CTIA petition, it is vital to the continued successful development of the U.S. wireless market that the Commission designate additional spectrum for 3G services. It equally important that spectrum for 3G services be harmonized with global implementation of IMT-2000. Failure to do both will put U.S. consumers, manufacturers and service providers at a competitive disadvantage with respect to the rest of the world.

Towards this end, Nokia believes that it is critical that the Commission work cooperatively with the National Telecommunications and Information Administration (NTIA) and private industry to study all candidate bands for 3G services comprehensively and expeditiously. The study of potential frequency bands for 3G should be done in the context of global solutions for a global market and with an eye towards the long-term development of mobile wireless services.

## **II. BACKGROUND**

As noted in the CTIA petition, the need for additional spectrum for 3G, above and beyond current and planned future allocations, is driven by the continued increase in demand for existing mobile services and projected demand for high bit rate services envisioned for 3G. Nokia expects the worldwide number of mobile subscribers to reach 1 billion by 2002 and the number of mobile connections to the Internet to surpass the number of personal computers connected to the Internet by 2003. The convergence of these trends in wireless and Internet is 3G, envisioned as mobile service capable of providing broadband and multimedia applications, including voice, video, and data.

Spectrum is the key ingredient necessary to providing these services and even with advances in technology, additional spectrum will be required to meet this demand. Recognizing the need to allocate additional spectrum for 3G services, above and beyond the spectrum currently used by first and second generation systems, several countries in Europe and Asia have already completed,

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<sup>1</sup> *Comment Invited on Third Generation Wireless/IMT-2000 Petitions (RM-9911 and 9920)*, Public Notice, DA 00-1673

begun or plan licensing for 3G. The UK, Germany, Finland, Spain and Japan have already licensed 3G services, meeting with tremendous market response, as seen in the high auction revenues generated in the UK and Germany. More than half a dozen European countries are expected to finish licensing 3G services by the end of 2000, with a number of European, Asian, and African countries expected to follow suit in 2001-2002. The United States risks lagging behind the rest of the world in moving towards a Mobile Information Society if it further delays in making spectrum available for 3G services.

As discussed in the CTIA petition, the spectrum that is designated for 3G should be aligned with the rest of the world in order to support development of wireless in the United States. First, the world telecommunications market is seeing an increase in the emergence of global operators and alliances that require global solutions from manufacturers. Globally common spectrum would support the introduction of these truly worldwide solutions. Secondly, U.S. operators and manufacturers will be better able to compete in this increasingly global market if they are able to work with a limited number of global bands for 3G. Finally, 3G is intended to provide easy and affordable access to mobile services, anywhere, at any time. This goal is facilitated by globally common spectrum, which enables global roaming and creates economies of scale that allow consumers to have greater access to a wider range of services and features at a lower cost.

While the United States faces challenges in designating spectrum that is aligned with the rest of the world, the aftermath of the WRC-2000 presents the U.S. Government with an opportunity to examine current and future U.S. spectrum allocations in the context of worldwide implementation. This is an opportunity for the United States to capitalize on its success in the Internet and facilitate mobile Internet access, the next logical step in wireless development.

### III. ISSUES FOR CONSIDERATION

As noted in the CTIA petition, a number of factors support the need for the Commission to initiate a rulemaking proceeding to designate spectrum for 3G, including: the identification of bands for IMT-2000 at the WRC-2000 in May of this year; the potential benefits of 3G to consumers; current and planned implementation of 3G spectrum around the world; the lack of a formal and clear process and timetable for studying candidate 3G bands in the United States; the studies being undertaken on IMT-2000 spectrum plans in ITU-T Working Party 8F that are scheduled to be reported at the next World Radiocommunication Conference or by 2003; and Congressional deadlines to auction part of the spectrum identified by the WRC-2000 for IMT-2000.

It is crucial that the Commission move forward in making spectrum available for 3G services. However, in order to meet the goals of identifying additional spectrum that is globally common to the greatest extent possible, it is crucial that the Commission examine all relevant bands as part of a comprehensive study that looks at the implications of and impediments to designating spectrum for 3G. These studies should be carried out cooperatively with NTIA, as U.S. Government users currently occupy some of the bands under consideration. A clear and public process and timeframe should be established for these studies to ensure that they are carried out as comprehensively and quickly as possible. This process should be largely completed before any spectrum is auctioned.

Nokia encourages the Commission to take into consideration implementation of 3G around the world, in particular taking into account and participating in the work of ITU-R Working Party 8F, which is tasked with developing harmonized plans for the use of the IMT-2000 bands. U.S. consumers, service providers and manufacturers are best served when they are able to reap the benefits of a global market.

#### IV. CONCLUSION

Nokia fully supports the CTIA petition requesting that the Commission initiate a comprehensive rulemaking proceeding to designate additional spectrum for 3G that is harmonized to the greatest extent possible with use around the world. Additionally, Nokia shares the concerns stated in the CTIA petition that premature auction of relevant bands before a detailed analysis is complete would be detrimental to U.S. consumers, manufacturers, and service providers. Nokia encourages the Commission to approach this analysis in the context of long-term and global considerations.

Respectfully Submitted,

**Nokia Inc.**



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