

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Petition for Rulemaking of the Wireless
Ethernet Compatibility Alliance To Permit
Unlicensed National Information Infrastructure
Devices To Operate in the 5.470-5.725 GHz
Band

RM-10371

Comments of Motorola, Inc.

Motorola, Inc., hereby submits its comments in this proceeding. Motorola urges the Commission to move forward with a rulemaking to implement the proposals set forth in the Wireless Ethernet Compatibility Alliance (WECA) petition.

As one of the leading manufacturers of communications equipment, Motorola has long sought ways to bring to consumers the benefits of high-speed data communications that will create a fully networked world. The United States is witnessing major growth in efforts to provide high-speed digital connections not only to large businesses but also to small businesses and homes.¹ In this regard, Motorola has developed cable modem technology as well as other equipment necessary to facilitate high-speed access to the Internet. High-speed connectivity will not fulfill its promise, however, without systems to transport data over the last few meters in a cost effective,

¹ Digital broadband subscribers are estimated to grow to 35.9 million by 2005, an increase of 590% over 2000 subscribership, *The Digital Economy Fact Book, Third Edition, 2001*. A Gartner Dataquest survey from June 2001 found that 65 million U.S. households are actively using the Internet. There has been an increase of 8.4 million users since Gartner Dataquest's previous survey in November 2000. High-speed Internet access achieved a penetration rate of just less than 25 percent of online households. Cable modem subscribers comprised more than 50 percent of all online high-speed households. Nearly 20 percent of dial-up households said they expect to subscribe to some form of high-speed connectivity by mid-2002. *What*

easy to implement manner. Other applications, such as video distribution within the home environment, require higher data rates and capacity than that currently available at 2.4 GHz. Wireless systems, such as those envisioned in the 5 GHz band, will allow many different companies to develop innovative products that will address growing consumer demand. Wireless home networking is experiencing substantial growth rates, revenues in the 802.11 market grew between the third and fourth quarter of 2001 by 21%, the vast majority represented sales of 802.11b products that operate in the 2.4 GHz band (a market that doubled in 2001 to \$1.2 billion).²

Commission action to provide access to additional spectrum will be an important step in overcoming the challenges that we face in fully realizing a networked world, comprised of an integrated wired and wireless broadband network. As described in a recent Computer Systems Policy Project report, WLAN will play an important role in a networked world, which provides enormous social and economic benefits.³

A major benefit of expanding the UNII bands, as proposed in the WECA petition, is the consumer benefit due to harmonization. The European Radiocommunications Committee (ERC), through ERC Decision ERC/DEC/(99)23⁴, has already identified the 5470 – 5725 MHz band for use by HiperLAN devices. This represents a very significant harmonized market place where consumers will benefit from lower equipment

Economic Slowdown? U.S. Consumer Demand for Internet Access Breaks Records.
http://gartner.com/5_about/press_releases/2001/pr20010829b.html

² Dell'Oro Group, <http://www.delloro.com/PRESS/PressReleases/WiL021402.shtml>.

³ "A Vision for 21st Century Wired & Wireless Broadband: Building the Foundation of the Networked World," Computer Systems Policy Project (CSPP), a public policy advocacy group comprised of Chairman and Chief Executive Officers from America's leading information technology companies.

⁴ ERC Decision of 29 November 1999 on the harmonized frequency bands to be designated for the introduction of High Performance Radio Local Area Networks (HiperLANs).

development and production costs due to economies of scale and reuse of components and engineering solutions.

WLAN technology that is envisioned to use the band proposed by the WECA petition is an enabling technology that will enhance hot-spot high-speed data delivery. Drivers for this efficient high-speed data delivery are consumer demands for content rich end-user experiences and systems provider demand for cost-efficient service delivery. The building blocks to meet the demand for anywhere/anytime services are 3G cellular networks and WLAN; the challenges of the developers of end product solution providers are to create systems that provide seamless integration. Innovation is fostered by these building blocks to deliver consumers services that enrich user experiences through anytime/anywhere delivery of applications such as video conferencing, telepresence and mobile augmented reality.

Accordingly Motorola respectfully requests that the Commission proceed with a notice of proposed rulemaking to amend Part 15 of the rules, authorizing the use of the 5470 – 5725 MHz band by U-NII devices. The proposed rules should merely extend the current rules governing the operation of U-NII devices in the 5250 – 5350 MHz band to the newly authorized band.

Respectfully submitted,
Motorola, Inc.

By: /s/ Robert Kubik
Robert Kubik, Ph. D.
Manager, Spectrum and Regulatory Policy
1350 I St., NW Suite 400
Washington, D.C. 20005-3305
(202) 371-6940

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