

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

In the Matter of

Wireless Broadband Policies and Deployment

GN Docket No. 04-163

COMMENTS OF MOTOROLA, INC.

Motorola, Inc. (“Motorola”) is pleased to submit these comments in response to the Public Notice issued on May 5, 2004 in the above-captioned proceeding.¹ Motorola applauds Chairman Powell’s creation of the Wireless Broadband Access Task Force, and welcomes the opportunity to comment on the development of the market for wireless broadband services.

Motorola’s position as a leading consumer electronics and telecommunications equipment manufacturer provides it with a unique perspective on developing wireless broadband technology. Because it designs consumer devices and infrastructure for virtually every telecommunications sector, Motorola’s markets include cable, wireline telecommunications, wireless, including both the commercial and private markets, and the automobile. This broad-based interest provided a good foundation for Motorola’s active participation in the Commission’s recent Wireless Broadband Forum.² Gary Grube, Chief Technical Officer of Motorola’s Commercial, Government and Industrial Solutions Sector (“CGISS”) participated on

¹ Public Notice, “Wireless Broadband Access Task Force Seeks Public Comment on Issues Related to Commission’s Wireless Broadband Policies,” DA 04-1266, GN Docket No. 04-36, FCC 04-28 (rel. Mar. 10, 2004) (“Wireless Broadband Public Notice”)

² Public Notice, “Federal Communications Commission Announces Agenda For Wireless Broadband Forum,” DA 04-1376 (rel. May 13, 2004).

the panel discussing the future of wireless broadband and, also, Motorola conducted several demonstrations of wireless broadband applications, including our fixed wireless Canopy™ solution and other radio local area network (“RLAN”) systems, demonstrating video communications and rural broadband deployment opportunities.

As described in Motorola’s comments in the IP-Enabled Services proceeding,³ providing a seamless transition across all of these user environments is integral to Motorola's approach to its development of wireless broadband products and services. Motorola’s vision of “seamless mobility” requires a variety of broadband-enabling wireless technologies relying on both licensed and unlicensed devices working together to provide an end-to-end transmission path of ample bandwidth.

Motorola is dedicating substantial resources toward the development and deployment of wireless broadband. In its effort to become the worldwide provider of choice for integrated and interactive broadband access, home communications, and entertainment solutions, Motorola is developing a broad range of wireless broadband applications and services. For example, Motorola’s Canopy™ platform offers state-of-the-art wireless technology that provides a secure, flexible, reliable wireless solution for extending broadband networks and enhancing the broadband experience for a wide range of providers and end users. The Canopy™ system’s performance makes high-demand technologies like voice over Internet Protocol (“VoIP”), video services, security surveillance, broadband Internet access and more both effective and cost-effective.

³ *IP-Enabled Services*, WC Docket No. 04-36, Comments of Motorola, Inc. (May 28, 2004).

Similarly, a number of new multi-mode phones will bring together diverse applications through wireless broadband networks. Examples include an “enterprise phone” that will integrate the functionality of a wired desktop phone with that of a mobile phone. This dual-mode phone uses both Wi-Fi and cellular standards to allow the user to easily switch voice phone calls from a wireless local area network (“WLAN”) to a wide-area cellular network. The ability to use a company’s internal WLAN instead of a commercial cellular network to make calls within a corporate infrastructure will produce significant cost savings for the enterprise customer. Moreover, the enterprise phone can serve as a replacement for a wired desktop phone because it will function as a wireless extension of a private branch exchange (“PBX”), allowing the user to forward calls and conference-in other parties. Another example is a dual-mode “world phone” that can be used on both the GSM and CDMA networks. This dual-mode phone will allow users to access data services on both types of networks.

Motorola has also been participating in a variety of Commission proceedings that are already looking at various aspects of wireless broadband. An overarching theme for Motorola is that the Commission must act proactively to ensure a balance of spectrum resources between various competing service requirements. It is important that flexibility be provided to accommodate changes in technology and service requirements; however, spectrum can be most efficiently utilized when a technical envelope is provided that protects licensees from interference, minimizes the need for guardbands, and provides certainty regarding the continued availability of the resource. It is also important that the Commission take into account the global allocation and use of spectrum when making spectrum use decisions. Global harmonization significantly increases the market scale, lowers costs for end users and provides greater opportunities for global interoperability and roaming.

As requested in the Public Notice,⁴ Motorola incorporates by reference the following previously-filed comments:

- *The 4.9 GHz Band Transferred from Federal Government Use*, WT Docket. No. 00-32, Comments of Motorola, Inc. (July 8, 2002)
- *The 4.9 GHz Band Transferred from Federal Government Use*, WT Docket. No. 00-32, Reply Comments of Motorola, Inc. (Aug. 7, 2002)
- Numerous filings by Motorola, Inc. in *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, ET Docket No. 00-258
- *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MB Docket 03-15, Comments of Motorola, Inc. (Sept. 3, 2003)
- *Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MB Docket 03-15, Reply Comments of Motorola, Inc. (Sept. 23, 2003)
- *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, WT Docket No. 03-66, Comments of Motorola, Inc. (Sept. 8, 2003)
- *Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz band*, ET Docket No. 03-122, Comments of Motorola, Inc. (Sept. 3, 2003)
- *Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz band*, ET Docket No. 03-122, Reply Comments of Motorola, Inc. (Sept. 23, 2003)

⁴ Wireless Broadband Public Notice at 2.

Within these referenced pleadings, Motorola addresses the need for additional spectrum and the appropriate regulatory approach for a variety of specific wireless broadband applications and technologies. As described therein, Motorola generally supports the allocation of sufficient quantities of spectrum with well-defined spectrum access rights and technical standards. While the Commission must be careful to not impose standards that unnecessarily restrict access or impede technological advances, structured regulations designed for specific broadband applications typically provide the best environment for successful product deployments.

In addition to spectrum and technical issues, the Commission must address regulatory issues that would impede the ability to realize the seamless mobility vision with converged services. This includes having commonality between rules for different services. Motorola notes that there are numerous proceedings in which such issues are being considered. The Broadband Policy Task Force offers an opportunity to provide a comprehensive vision for addressing the spectrum, technical and regulatory issues related to deployment of a seamless, integrated broadband structure, and Motorola looks forward to discussing these issues in more specific detail with the members of the task force in the weeks to come.

Respectfully Submitted,

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Dated: June 3, 2004