



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Telecommunications and**  
**Information Administration**  
Washington, D. C. 20230

December 12, 1994

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Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

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Re: ET Docket No. 94-~~124~~

Dear Mr. Caton:

Please incorporate as part of the official record for ET Docket No. 94-124, Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications, the enclosed letter sent to Chairman Reed Hundt on behalf of the National Telecommunications and Information Administration ("NTIA"), U.S. Department of Commerce.

Sincerely,

*Phyllis E. Hartsock*  
Phyllis Hartsock  
Acting Chief Counsel

Enclosure

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**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Assistant Secretary for Communications**  
**and Information**  
Washington, D.C. 20230

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

The Honorable Reed Hundt  
Chairman  
Federal Communications Commission  
Washington, D.C. 20554

In Re: ET Docket No. 94-32  
ET Docket No. 94-124  
PR Docket No. 93-61

Dear Chairman Hundt:

As you know, recent years have seen rapid growth and ubiquitous implementation of nonlicensed radio frequency devices under Part 15 of the Commission's rules.<sup>1/</sup> Although originally developed as consumer-oriented devices, Part 15 devices are now also being used for industrial applications, such as security and alarm systems, medical monitoring systems, and local area networks. The critical importance of wireless systems such as these to the future development of the National Information Infrastructure (NII) is well recognized and supported. Wireless connectivity will be essential to support ubiquitous, affordable and adaptable networking capabilities, and it will facilitate many mobile applications. Furthermore, nonlicensed wireless components of the NII will provide significant opportunities for innovators and small companies to make contributions to the overall mix of products and services available through the NII.

Part 15 devices were developed under the condition that they not cause interference to, or claim interference protection from, licensed devices.<sup>2/</sup> Some new technologies and applications, however, may require higher status and greater interference protection in some bands and for certain applications. We commend the Commission for recognizing this issue when it designated the 1910-1930 MHz band for nonlicensed services in its recent rulemaking on Personal Communications Services.<sup>3/</sup>

While most Part 15 devices should be able to continue operations under the current regulations, the Commission should consider designating spectrum for some nonlicensed uses or establishing a new nonlicensed radio service and associated allocations. Such approaches

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1/ See 47 C.F.R. §15.01 et seq. (1992).

2/ See, e.g., 47 C.F.R. §15.5.

3/ Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, Memorandum Opinion and Order, 9 FCC Rcd 4957 (June 13, 1994).

could facilitate particular applications that may require a more protected environment. These approaches could be taken in some of the bands potentially identified for Part 15 systems, such as those discussed in the Commission's rulemaking on frequencies above 40 GHz.<sup>4/</sup> Providing spectrum for nonlicensed uses should also be considered for the 2402-2417 MHz band as part of the Commission's rulemaking on the spectrum transferred from Federal Government use.<sup>5/</sup>

Such approaches will not, however, adequately address situations where spectrum bands are already in heavy use, such as in the 902-928 MHz band, addressed in the Commission's proceeding on automated vehicle monitoring systems.<sup>6/</sup> Having encouraged the growth of nonlicensed uses by providing specific regulatory guidance for their incorporation into the radio environment, the Commission should now acknowledge the legitimate interests and expectations of both the licensed automated vehicle monitoring systems and the nonlicensed stakeholders in this band. The Commission should support resolution of interference problems among licensed and nonlicensed users and consider specifying system technical characteristics to facilitate coexisting systems. We believe that recent experience, such as in the Los Angeles area, demonstrates that, with certain system technical criteria, the interference probability can be limited and these systems can coexist. Furthermore, joint efforts to resolve interference as already undertaken by entities offering automated vehicle monitoring systems and those providing Part 15 devices and applications can often provide satisfactory solutions.

We also believe that regulatory incentives are needed to encourage and support licensed and nonlicensed services that most efficiently use and share spectrum.<sup>7/</sup> Digital radio technologies are facilitating more efficient use of spectrum without jeopardizing the quality or scope of applications. For example, Federal uses of the spectrum are presently being

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4/ Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications, ET Docket No. 94-124, Notice of Proposed Rulemaking, Nov. 8, 1994.

5/ Spectrum Below 5 GHz Transferred From Federal Government Use, ET Docket No. 94-32, Notice of Proposed Rulemaking, 59 Fed. Reg. 59393 (Nov. 17, 1994).

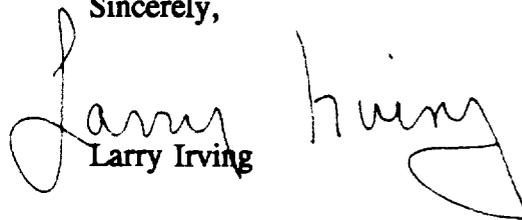
6/ Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, Notice of Proposed Rulemaking, 8 FCC Rcd 2502 (Apr. 9, 1993).

7/ We continue, however, to support the use of auctions and other market mechanisms, where appropriate, for the assignment of spectrum in licensed services. Under your leadership, the Commission has substantially improved the way it assigns spectrum for such systems. The Commission's use of its auction authority has increased competition, reduced the time required to deploy new wireless services, introduced market mechanisms for the assignment of spectrum, and reduced the deficit. In addition to our strong support for the auction process, we also recognize and support the Commission's practices that permit technological experiments and advancements in services, particularly by small businesses lacking resources to obtain spectrum through auctions or through the open market.

examined with the intent to modernize systems so that less spectrum is required to provide services. Consistent with the increasingly heavy demands of NII applications on the scarce spectrum resource, the Commission should continue to advocate spectral efficiency and should encourage modernization of systems over time.

Small businesses, including many Part 15 manufacturers and service providers, are particularly vulnerable to uncertainties in the regulatory process. We urge the Commission to provide a long-term, stable regulatory environment for both licensed and nonlicensed users, consistent with international spectrum allocations, which will be crucial to the successful removal of barriers to participation by small entities. Such action will also accelerate private sector development of products and services that will further both the National and Global Information Infrastructures.

Sincerely,

A handwritten signature in cursive script that reads "Larry Irving". The signature is written in black ink and is positioned to the right of the typed name "Larry Irving".

Larry Irving