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**BY ELECTRONIC FILING**

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

**Re: Oral Ex Parte Presentation  
ET Docket No. 98-153**

Dear Ms. Dortch:

This is to report that on May 23, 2002, representatives of Cingular Wireless, QUALCOMM, and Verizon Wireless (collectively referred to as the "Wireless Companies") met with members of the staff of the Office of Engineering & Technology ("OET Staff"). The purpose of the meeting was to discuss the need for collaborative testing as part of the Commission's further review of the technical rules it adopted for ultra wideband ("UWB") operations in its First Report & Order in the above-referenced proceeding. The Wireless Companies believe that such testing is necessary to determine the extent of harmful interference from UWB devices to wireless phone service. In the meeting, we briefly discussed the procedures for such testing and offered the cooperation and assistance of our respective companies to the Commission as it conducts its testing.

Attending the meeting for the Wireless Companies were Dr. Samir Soliman (by telephone) and myself on behalf of QUALCOMM; Jim Bugel on behalf of Cingular Wireless; and, Don Brittingham on behalf of Verizon Wireless. Attending the meeting for OET were John Reed, Ron Chase, Michael Marcus, Steve Jones (by telephone), and Dave Means (by telephone).

During the meeting, Dr. Soliman and Mr. Brenner explained that throughout this proceeding, the Wireless Companies have expressed their concern over interference from UWB devices both to wireless phone service in general and, in particular, to E911 service using QUALCOMM's assisted GPS technology. They explained that protecting the GPS band is insufficient to ensure that E911 service is not degraded as a result of UWB emissions, but rather that E911 service also needs a reliable communications link to operate successfully. They also

expressed particular concern over interference from UWB devices to wireless phones indoors, where the PCS or cellular signal is marginal. (Dr. Soliman explained that the building penetration loss at PCS frequencies can be as high as 30 dB.)

Dr. Soliman and Mr. Brenner explained that these concerns lead QUALCOMM to conduct and file with the Commission two sets of tests. The first tests studied the harmful interference of UWB emissions on wireless service in general as measured by the degradation in the frame error rate in a wireless phone operating within proximity of a UWB device. The second tests studied the harmful interference of UWB emissions on E911 service as measured by the degradation in the overall signal-to-noise plus interference level (C/N +I) suffered by a wireless phone using assisted GPS and operating within proximity of a UWB device.

Dr. Soliman and Mr. Brenner explained that a limitation on QUALCOMM's testing was that it could not be conducted with actual UWB devices because UWB proponents declined to provide QUALCOMM with such devices. They urged the FCC to conduct these types of tests with actual UWB devices and to test any other interference scenarios of interest to the Commission, but under controlled conditions to exclude sources of interference other than the UWB devices. The OET Staff noted that, at present, they do not have any actual UWB devices for testing, although they are hopeful that they will receive some devices.

During the meeting, the Wireless Companies requested information about the procedures that the FCC plans to follow in conducting tests. The OET Staff explained that OET has not yet decided whether it would make the FCC's test plan available to the public, although Mr. Jones and Mr. Means did indicate that any recommendations for how the tests should be conducted or for the parameters of the testing would be welcome. The Wireless Companies responded that they would provide such information in a subsequent filing.

As for the FCC's plans for testing, Mr. Means and Mr. Jones indicated that they were concerned about the availability of equipment for testing of the interference from UWB devices to E911 service. The Wireless Companies offered their cooperation to make any necessary equipment available to the FCC. Dr. Soliman explained the procedures that QUALCOMM used in its testing of the harmful interference from UWB emissions on E911 service, and he reiterated that any testing by the FCC should occur in controlled conditions so that the harmful interference from UWB devices can be isolated from other factors.

Mr. Means and Mr. Jones did state that, at present, they had no plans to conduct testing of the harmful interference from UWB devices to wireless phone service. They said that they were not aware of any evidence that the impact of UWB emissions on wireless service was any different than the impact of Part 15 devices. Dr. Soliman referred them to the study submitted by Sprint which shows that Part 15 devices such as personal computers do not add to noise levels in anything remotely resembling the way that UWB devices do. The Wireless Companies urged the OET Staff to conduct tests to study the potential for harmful interference to wireless phones from UWB devices. Mr. Means and Mr. Jones indicated that any such testing would have to be conducted outside of the FCC's process on a parallel track. However, they did indicate that they would consider how the FCC could participate in such testing if administered by private industry as a supplement to the testing the FCC will be conducting.

Finally, Mr. Means, Mr. Jones, and Mr. Marcus said that the Commission was interested in conducting testing to determine the ambient noise levels inside buildings. Dr. Soliman explained that he believed that this would be a very difficult matter to test since it will be impossible to isolate the noise from legitimate signals using conventional equipment.

Sincerely yours,

Dean R. Brenner  
Attorney for QUALCOMM Incorporated

cc: Michael Marcus  
John Reed  
Ron Chase  
Steve Jones  
Dave Means