

**Statement In Support of Clearwire Spectrum Holdings II, LLC's Application for
Experimental License in Portland, Oregon**

Clearwire Spectrum Holdings II, LLC, ("Clearwire") a limited liability company and a wholly-owned subsidiary of Clearwire Corporation¹ is hereby requesting Commission authorization to construct an experimental wireless system in the Portland, Oregon area using existing Educational Broadband Service ("EBS") spectrum licensed to Portland Regional Educational Telecommunications Corporation ("PRETC") under EBS Station WHR522 (Channels C1-4) and Hispanic Information and Telecommunications Network, Inc. ("HITN") under EBS Station WLX681 (Channels D1-3).² Both HITN and PRETC have consented to Clearwire's temporary use of their licensed spectrum for the subject program of experimentation and have provided Clearwire with letters demonstrating that consent (one is included and one will be included shortly and associated).

The experimental system will be used to evaluate the system level performance of equipment designed to meet the WiMAX 802.16e performance criteria. The experimental license is necessary because the Motorola equipment that is to be used for the test has not received FCC type acceptance. The equipment is branded under the name Motorola Wi4 and additional information about the equipment can be found on the Motorola website (<http://www.motorola.com/>). As described by Motorola:

Wi4 WiMAX provides enhanced broadband wireless access in fixed, nomadic and mobile environments. Operators with wi4 WiMAX networks will be able to extend coverage and capability to serve today's large metro areas as well as new markets previously not reached.

Users in rural markets and developing countries will finally have broadband services that they can afford, while mobile users will benefit from access to new mobile multimedia services and instant access to the whole of the Internet, wherever and whenever they want it.

Wi4 WiMAX end-to-end solutions meet virtually all of the operator's deployment needs including access, core, devices, network management and services.

The theory of operation is explained fully in documents created by the IEEE and WiMAX Forum (www.wimaxforum.org). It is Clearwire's objective to evaluate the key performance parameters (coverage, capacity, quality of service, etc.) of the 802.16e

¹ Both Clearwire Spectrum Holdings II, LLC (File Number 0002768668) and Clearwire Corporation (File Number 0002767874) have current FCC Forms 602 Ownership Disclosure Forms on file with the Commission's Wireless Telecommunications Bureau.

² Although HITN's license includes all four D-Group channels, the application only requests authorization to use channels D1-3, as Channel D4 will be used to provide educational programming. See, PRETC Request for Special Temporary Authority filed with the Wireless Telecommunications Bureau to allow it to use Channel D4 to continue to provide PRETC's educational programming.

equipment as compared to the equipment's specifications as well as how it compares to commercially available pre-WiMAX class equipment. In order to effectively evaluate system level performance, Clearwire intends to construct a system with a sufficient number of cells to create a realistic signal propagation and interference environment. The objective of the test is to understand the capabilities and limitations of the WiMAX equipment in order to establish the design processes to be used in future deployments of 802.16e technology.

The mobile WiMAX specifications have long been in development and are now resulting in the creation of commercially available equipment. The implementation of mobile WiMAX will result in a revolution of the wireless industry allowing the development and implementation of high speed applications in a mobile device. The proposed spectral efficiency of the WiMAX system will allow precious and limited spectrum to be used more effectively in the commercial market place.

Description of Directional Antenna

A directional antenna will be used with the following parameters:

- (a) width of beam in degrees at the half-power point: 60 to 120 degrees
- (b) orientation in horizontal plane: various, 0 to 359 degrees
- (c) orientation in vertical plane: various, +/-5 degrees from horizon