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10555 Sorrento Valley Road, San Diego, CA 92121-1617 ☐ (619) 587-1121 ☐ Fax: (619) 452-9096

August 9, 1994

Exhibit 2

H. Franklin Wright, Chief
Frequency Liaison Branch
Federal communications Commission
Experimental Radio Service
P.O. Box 388320
Pittsburgh, Pennsylvania 15251-5320

Dear Mr. Wright:

QUALCOMM, Incorporated, ("QUALCOMM") pursuant to section 5.56 of the Commission's Rules, 47 C.F.R. § 5.56, hereby requests a Special Temporary Authorization (STA) to operate experimental facilities in San Diego California and certain other locations.

QUALCOMM is providing the following information in accordance with Section 5.56

1. Name and address of applicant.

QUALCOMM Incorporated
6455 Lusk Boulevard
San Diego, California 92121-1121

2. Need for special action. On March 3, 1993, the Commission granted QUALCOMM a Special Temporary Authorization (Call Sign KA2XPW, File number S-1406-EX-93) to operate its dual mode cellular equipment anywhere within the Continental United States. A copy of the STA is attached. This STA expires on September 3, 1994. The Telecommunications Industry Association (TIA) has published a new voluntary industry standard for digital cellular telephone systems based on QUALCOMM's code division multiple access (CDMA) technology. Because of the TIA action, many cellular carriers want to evaluate QUALCOMM's CDMA technology. As a result, QUALCOMM anticipates a continuing need to conduct demonstrations and testing

of its CDMA equipment in many areas of the country over the next several months.

In addition, Section 22.120 of the Commission Rules, 47 C.F.R. § 22.120, requires that transmitters used in this service be type-accepted by the Commission pursuant to Subpart J of Part 2 of the Commission Rules. On January 25, 1993, QUALCOMM submitted a type acceptance application for its cellular mobile station equipment (FCC ID No. JDC-DMM-1). The Commission has granted this application on March 5, 1993. QUALCOMM has not yet submitted a type acceptance application for its base station equipment. QUALCOMM needs to do more testing of its base station equipment before it submits the type acceptance application.

QUALCOMM is planning to file an experimental license application shortly to cover its planned testing and demonstration activities over the next 2 years. However, because it is unlikely that it will be able to file its experimental application and receive a grant prior to the expiration of its existing STA, it hereby requests a 4 month extension of that STA.

3. Type of operation to be conducted. QUALCOMM will conduct laboratory and field testing of dual mode (FM and CDMA) mobile and base station equipment to ensure that it complies with all Commission requirements. QUALCOMM will also be doing demonstrations of its CDMA system at various locations in the continental United States.

4. Purpose of operation. The purpose of the proposed operation is to carry out all testing required to have QUALCOMM dual mode base station equipment type-accepted by the Commission. In addition, QUALCOMM will conduct functionality testing to ensure that the equipment it is testing is compatible with that manufactured by others. QUALCOMM will be demonstrating the functionality of its equipment to various carriers at various locations throughout the continental U.S.

5. Time and date of proposed operation. QUALCOMM will conduct on-the-air test of developmental equipment at various times throughout the day from the date of the grant until the expiration of its authorization.

6. Class of station, Call sign of station and nature of service. The proposed station is an experimental station. No call sign has been assigned and no commercial service will be offered.

7. Location of the proposed operation. The operation will take place mostly within the San Diego Metropolitan Statistical Area(MSA). System demonstrations will be conducted at various other locations in the continental United States. The testing will not interfere with the operation of any existing cellular licensee.

8. Equipment to be used including name of manufacturer, model and number of units The following equipment, manufactured by QUALCOMM will be used in the tests:
CD-3000, CDMA Digital Mobile Phone
CD-7000, CDMA Digital Portable Phone
QCS-800, CDMA wireless communications system.
Other developmental and test equipment will also be used.
Depending upon the nature of the tests as many as 100 mobiles and 5 base stations will be used.

9. Frequencies desired The equipment will operate in the cellular bands as set out in Section 22.902 of the Commission Rules, 47 C.F.R. § 22.902. In particular, the mobiles will operate on 824-835 MHz and 845-846.5 (A band) and 835-845 MHz and 846.5-849 MHz (B band). The base stations will operate on 869-880 MHz and 890-891.5 MHz (A band) and 880-890 MHz and 891.5-894 MHz (B band).

10. Plate power input in final radio frequency stage All the equipment to be used is solid state. The maximum radiated power of the equipment will not exceed that specified in Section 22.904 of the Commission's Rules, 47 C.F.R. § 22.904. In particular the effective radiated power from the mobiles will not exceed 7 watts and the effective radiated power from the base stations will not exceed 500 watts.

11. Type of emission The equipment to be tested will be dual mode digital cellular radio equipment. One emission will be a direct sequence spread spectrum signal with a bandwidth of 1.25 MHz operating at chip rate of 1.23 MHz. The spread spectrum signal also will be modulated by a digitized voice signal operating at a variable data rate that will not exceed 9600 bits/ second. The second emission in the dual mode set will be F3E as described in section 22.906 of the Commission's Rules, 47 C.F.R. §22.906.



11. Overall height of antenna structure above ground All fixed Station antennas will be mounted on existing structures and will not extend more than 6 feet above such structures. All mobiles will be operated at ground level or within existing structures.

If you have any questions regarding this request please contact either myself at (202) 223-1720 or Robert Sanchez at (619) 658-3848.

Sincerely yours,



Kevin J. Kelley
Vice President, External Affairs