21st Dec. 2004

Authorization & Evaluation Division
Federal Communications Commission Laboratory
7435 Oakland Mills Road
Columbia, MD 21046

Dear Sir
Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its application for Certification of the transmitter with FCC ID: AZ489FT7011.

This OEM (Original Equipment Manufacturer) integrated transceiver module is similar to previously certified iO1500 integrated transceiver module with FCC ID: AZ492FT5826, and uses similar circuitry and software as previously certified i860 transceiver with FCC ID: AZ489FT5833. The variable output power (0.086 to 605 milliwatt) transmitter which is part of this transceiver is used in a SMR and EA SMR trunking system operating in the United States 806-825/851-870MHz and 896-901/935-941 MHz frequency band. Certification is sought for, and performance data is provided.

This transceiver module will be marketed as an Original Equipment Manufacturer (OEM) module. It shall be embedded in a variety of end products, as described in 47 CFR 2.1091(d)(4). It is supplied neither with battery nor antenna, only with an antenna connector. The characteristics of having an antenna connector and no antenna are like those of transmitters classified as a mobile device, as defined in 47 CFR 2.1091(b), rather than a handheld portable device as defined in 47 CFR 2.1093(b).
Since Motorola neither manufactures nor supplies the antenna(s) that will be used in the final application of this product, it is not possible to measure the MPE of the actual device as it will be integrated into the end product. Therefore MPE calculation was done with the MPE General Population limits for a mobile device in Table 1(B) of 47 CFR 2.1310 as required by 47CFR 2.1091(c).

This module will be marketed to OEMs, who will integrate it into their equipment, i.e. lap-top computers, portable/mobile terminals, vending machines, etc. Since the end product may, in some cases, be used within a digital device such as a laptop computer to be marketed in the United States, it is our expectation that the end product may bear a separate FCC identifier in accordance with 47 CFR 2.925(b). It will be the responsibility of the integrator to conduct appropriate RF exposure evaluation, provide user manual information and obtain FCC equipment authorization for the end product. It is our intention to provide the OEM party with a letter notifying them of the need to comply with 47 CFR part 2 subpart J, et. al., once a purchasing agreement has been reached.

This transceiver is of the receive-first type described in International Telecommunications Union Recommendation ITU-R M.1221 entitled Technical And Operational Requirements For Cellular Multimode Mobile Radio Stations. It must first find, acquire and lock onto a control channel from a predefined set of control channel frequencies assigned to a companion Authorized base station (e.g. – FCC ID: ABZ89FC5792). Transmission is not possible until lock to a base station control

channel has been achieved, and then transmission is limited to digitally modulated service request bursts on the reverse control channel. Upon recognition of a proper request, the control channel base station transmitter will then assign the transceiver a traffic channel for transmission of digital voice, circuit-switched data or Packet-switched data from the set of frequencies for which the trunking system is licensed.

It is expected that this time division multiplexed transceiver marketed in the United States will also be used for itinerant operation with companion Authorized Base Stations by users requesting trunked radio and telephone interconnect service while roaming outside the United States. In some countries the companion base stations are licensed to operate at frequencies in the 821-825/866-870 MHz band in addition to some of those in the 806-825/851-870 MHz band normally used in United States SMR systems. Consequently, this transmitter has been designed to meet FCC requirements for operation in the 806-825 MHz band over the more global band of 806 - 825 MHz when used with a companion Authorized Base Station. Thus, performance data is provided to substantiate FCC compliant operation with a Companion Base Station over the broader 806 to 825 MHz band and the 935-940 MHz band.

To facilitate global roaming it is kindly requested that a note be provided in the Grant, which states that this ‘receive first’ type of equipment is compliant for transmitter operation over the broader range 806-825 MHz when used with a compatible Authorized Base Station. This will aid equipment authorization in foreign countries, which accept a United States FCC Grant for Equipment Authorization, yet not jeopardize United States public safety or cellular systems licensed to operate in the 821-825 MHz frequency band since no compatible base station may be authorized on those frequencies in the United States.

The subject transmitter complies with 47 CFR 90.203 of the rules in that the operator cannot directly program transmit frequencies using only the unit's normally accessible external controls.

Enclosed is a complete Certification Application comprised of 15 Exhibits. Contact me at (954) 723-5793 if you require any additional information.

Sincerely,
/s/ Mike Ramnath (signed)
Manager, Regulatory Compliance
Email: Mike.Ramnath@motorola.com