



**DATE:** July 9, 2001  
**TO:** FCC OET  
**FROM:** Jim Roesch; Asst. VP – Product Development  
**RE: RF EXPOSURE LIMITS**  
**CC:** File

Statement of exclusion:

The Terion mobile messaging service is primarily targeted to over the road transportation assets, or heavy-duty vehicles (18 wheeled trucks). The DHF-2000 transceiver is mounted in the cab of the truck with either a 7' or an 11' coaxial cable extending to either the rear of the cab or the side mirror where a whip antenna is mounted (in every case the separation is much greater than 20 cm). In this configuration, the DHF-2000 mobile messaging unit would be classified as a "mobile" device, not "portable". In addition, it could be argued that truck cabs, where the Terion mobile messaging service is knowingly operated by the human occupants in the performance of their duties (truck drivers or passengers) is a "controlled" environment. However, the Terion transmitter is subject to exclusion even if operated in what would be considered an "uncontrolled environment". Devices operating below 1.5 GHz with a radiated power of less than 1.5 Watts are "categorically excluded" from RF exposure evaluations (e.g., assumed to comply without any testing). The grant authorizing Terion (formerly Flash Comm, Inc.) waivers to operate in portions of the land mobile business radio services band (Part 90) include only frequencies below 25.037 MHz (DA 97-1451 Appendix C) and a radiated power of less than or equal to 1 Watt (DA 97-1451 Appendix A). Therefore, Terion transmitters are categorically excluded from RF exposure evaluations.

Definitions for terminology and technical guidelines for this memo derived from:

IEEE C95.1-1992 - "IEEE standard for Safety Levels with respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz"

and CFR 47 Part 2.1091