

**Description of Application, Services to Be Provided,
Frequencies Requested, and
Public Interest Showing – Items 24 and 43**

Description of Application; Frequencies Requested

By this Application, Comtech Mobile Datacom Corporation (“CMDC”) requests authority to modify its existing blanket license, E090027 (the “ROUS” license), to add four (4) new Site IDs and delete all four (4) existing Site IDs. The sole purpose of these changes is to eliminate certain confusing aspects of the ROUS license by consolidating, renaming, and renumbering Site IDs and antennas. As such, the purpose of these changes is strictly administrative; there will be no changes to CMDC’s current operations as a result of these modifications.

The following Site ID should be added to the license:

- (a) Site ID “R-Sky.” The mobile earth terminals (“METs” or “MESs”) METs included under this Site ID are CMDC’s MTM202, operating in CONUS, Alaska, Hawaii, and any U.S. territory or possession within the footprint of SkyTerra 1.
- (b) Site ID “R-Inmar.” The METs included under this Site ID are CMDC’s MTM202, operating in CONUS, Alaska, Hawaii, and any U.S. territory or possession within the footprint of the satellites on the ISAT list.
- (c) Site ID “R-CMT MSAT.” The METs included under this Site ID are CMDC’s CMT-500, operating in Alaska, Hawaii, and any U.S. territory or possession within the footprint of the MSAT-1 and MSAT-2 satellites.
- (d) Site ID “R-Old MSAT.” The METs included under this Site ID are CMDC’s MT2010, MT2011, MT2012, MTM202, and MTM203, operating in any U.S. territory or possession within the footprint of the MSAT-1 and MSAT-2 satellites.

The following Site IDs should be deleted from the license:

- (a) Site ID “SkyTerra-202;”
- (b) Site ID “MSV—ROUS;”
- (c) Site ID “ISAT--ROUS/CONUS—202;” and
- (d) Site ID “MSAT 1&2 TP.”

ROUS (E090027) Modification Application – Clean Up

All MESs authorized under this license operate in portions of the L-band (1525-1544/1545-1559 MHz and 1626.5-1645.5/1646.5-1660.5 MHz). Per Special Provision 502 in CMDC's current ROUS license, CMDC's total number of MESs authorized under E090027 and its two (2) other blanket MET licenses, E090029 and E990143, will not exceed the 25,000 authorized under E990143 unless an increase in CMDC's total number of authorized MESs has been otherwise authorized by the Commission.

CMDC notes that in granting CMDC's last requested modification to E090027 (File No. SES-MOD-20110131-00094), the Commission granted to CMDC a new two-year waiver (until April 1, 2013) of footnotes US308 and US315 to the U.S. Table of Frequency Allocations and Section 25.136(d) of the Commission's Rules with respect to the operation of its MTM202 terminals outside of the continental U.S. ("CONUS") (*see* Special Provision 90011 in CMDC's current ROUS license). As CMDC explained in Exhibit A to its modification application in File No. SES-MOD-20110131-00094, the MTM202s are unable to cease transmissions within three (3) seconds when operated outside of CONUS. The Commission granted CMDC a waiver because CMDC was able to satisfy the requirements of the National Telecommunications and Information Administration ("NTIA") for such a waiver.¹ Specifically, CMDC demonstrated that the total number of non-compliant METs is less than 10,000 and submitted an analysis of its MET operations in the U.S. showing the number of packets each month that exceed three (3) seconds in duration.²

Since this new modification application proposes no changes to CMDC's current operations – as noted above, this application merely proposes to consolidate, rename, and renumber CMDC's Site IDs and antennas – no new waiver request is included in this modification application, and no coordination with NTIA is required. CMDC assumes and accepts that the term of its ROUS license will not change as a result of any grant of this new modification application (*i.e.*, the license term will end on April 1, 2013).

Services to be Provided

CMDC will use E090027 as modified to provide the same types of services that CMDC is currently providing under E090027. At present, CMDC provides mobile packet data communications services to government and commercial customers throughout the United States and overseas.

CMDC terminals typically are placed on land vehicles or at remote, fixed site locations. The terminals transmit and receive data packets via dedicated channels in the L-band. The

¹ See Letter of Karl B. Nebbia, Associate Administrator, Office of Spectrum Management, U.S. Department of Commerce, NTIA, to Mr. Julius Knapp, Chief, Office of Engineering and Technology, FCC, May 13, 2009 ("*NTIA 2009 Letter*") at 4.

² See CMDC modification application in File No. SES-MOD-20110131-00094 at Exhibit C (waiver request).

ROUS (E090027) Modification Application – Clean Up

packets can be routed over any of several terrestrial data networks, or to other mobile transceivers in the CMDC network. Use of the satellite relay is as a “bent pipe,” meaning that only bandwidth and power are purchased from the satellite relay operator. Network management is provided by CMDC’s 24/7 Network Operations Center in Germantown, MD.

CMDC’s system employs a version of CDMA that relies on code phase as opposed to multiple codes to differentiate between overlapping signals. The maximum number of simultaneous transmissions processed today is 4. CMDC is developing state-of-the-art, next generation, earth station equipment that will be capable of processing 34 simultaneous transmissions in the near future.

At present, CMDC has over 150,000 activated terminals in service, of which only a small percentage operate in the U.S. during any given month. The vast majority of CMDC’s terminals have been deployed in support of three (3) applications for the U.S. military and operate outside of the U.S.

Public Interest Showing

Grant of this Application will serve the public interest. Grant of this request should help resolve some of the confusion regarding CMDC’s ROUS license, thereby relieving some of the administrative burdens on FCC staff and CMDC.