

Comtech Mobile Datacom Corporation

October 2021 Amendment

to

ROUS (E090027) September 25, 2019 Modification Application

(File #SES-MOD-20190925-01207)

Update to Exhibit A

**This amendment provides the following updates
to Exhibit A, as originally submitted in September, 2019:**

- Consistent with the purpose of this amendment, Comtech Mobile Datacom Corporation (“CMDC”) requests that this license be renewed through November 2, 2023.

Per Special Provision 90011 in the existing E090027 (“ROUS”) license, the ROUS license is limited to a two-year term. Pursuant to the last renewal grant¹ the license was scheduled to expire on November 2, 2019. On September 23, 2019, CMDC filed the above-referenced modification application to renew the ROUS license.² That application, accepted for filing on October 30, 2019, currently remains pending. It is CMDC’s understanding that the grant of that application, when issued, likely will backdate the grant to November 2, 2019, with a resulting license expiration date of November 2, 2021 (in two business days). That will leave no time for CMDC to apply for the next renewal prior to the extermination of the just-granted term. Pursuant to discussion with IB Staff, CMDC is filing this amendment to the pending modification application, to request that the grant of that application also renew the ROUS license for the upcoming term, *i.e.* November 2, 2021 through November 2, 2023. In support of this request, this amendment filing includes updates, insofar as appropriate to Exhibits A, B, C and D.

- CMDC submits the following updated data points:
 1. There are only about 200 (or fewer) MTM202 METs in existence today and no additional MTM202s are being built. (update to 2019 Ex. A, page 1, para 3)
 2. At present, CMDC has over 7,500 activated terminals in service. (update to 2019 Ex. A, page 2, para 3.)

(Copy of 2019 Exhibit A attached for reference.)

¹ IB File No. SES-MOD-20170908-00993. The application was granted on October 30, 2017.

² CMDC also filed for Special Temporary Authority on October 18, 2019 (IB File No. SES-STA-20191018-01342).

ROUS (E090027) Modification Application – September 25, 2019**Description of Application, Services to Be Provided,
Frequencies Requested, and
Public Interest Showing – Items 24 and 43****Description of Application**

By this Application, Comtech Mobile Datacom Corporation (“CMDC”) requests a modification to its existing blanket license, E090027 (the “ROUS” license) to extend the license term, which currently expires on November 2, 2019. CMDC asks that the license be extended for two (2) years.

Per Special Provision 90011 in the existing ROUS license, the ROUS license is limited to a two-year term ending November 2, 2019. If CMDC wishes to continue to operate beyond November 2, 2019, Special Provision 90011 requires that CMDC file a modification application, and in that application CMDC must (A) justify its need to continue to operate under a waiver of Footnotes US308 and US315 of the United States Table of Frequency Allocations, 47 CFR § 2.106, Footnotes US308, US315, and Section 25.136(d) of the FCC Rules, 47 CFR § 25.136(d), and (B) submit an analysis of its mobile earth terminal (“MET”) operations in the U.S. showing the number of packets each month having a transmission duration of three (3) seconds or longer since November 2017 (*i.e.*, since the release of the Commission’s authorization in File No. SES-MOD- 20170908-00993, which last extended the license term).

CMDC’s waiver request is provided in Exhibit D. As discussed in Exhibit D, today only one (1) of CMDC’s MET models, the MTM202, requires a waiver, and only when this terminal is operated outside of the continental U.S. (“CONUS”). There are only about 400 MTM202 METs in existence today, and no additional MTM202s are being built. Worst case, the MTM202 requires only 3.6 seconds to shut down. All CMDC METs other than the MTM202 comply with NTIA’s requirements and thus do not require a waiver of the real-time preemption and priority access requirements. The MTM202 complies with NTIA’s requirements, and thus does not require a waiver, *when operated in CONUS*.

CMDC’s analysis of its MET operations in the U.S. since November 1, 2017 showing the average number of packets per month and per day having a transmission duration in excess of three (3) seconds is also provided in Exhibit D.

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

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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. In February 2013, the maximum number of simultaneous transmissions processed was four (4). CMDC developed and has deployed state-of-the-art, next generation, earth station equipment that processes 34 simultaneous transmissions.

At present, CMDC has over 15,000 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.

Frequencies Requested

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, E090027, CMDC’s total number of MESs authorized under E090027, E090029 and E990143 will not exceed the 25,000 unless an increase in CMDC’s total number of authorized MESs has been otherwise authorized by the Commission. (The license with call sign E990143 has expired and those operations were folded into call sign E090027 in 2013.)

Public Interest Showing

Grant of this Application will serve the public interest, as it will enable CMDC’s customers, including but not limited to the U.S. military, to continue to use the services that CMDC provides with the subject METs on SkyTerra 1, the ISAT satellites, MSAT-1, and MSAT-2.