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Comtech Telecommunications' New Turbo Codec Modem Option Performs Successfully in Trials in Scotland and Thailand

- Meets Specifications, Saves Bandwidth and Power**
- Option for CDM-550-T Digital Satellite Modem**

MELVILLE, NY - September 28, 1999 - Comtech Telecommunications Corp. (Nasdaq: CMTL) today announced that its new Turbo Codec modem option, an innovation intended to save bandwidth and electric power in satellite transmissions, has successfully completed trials with two major satellite communications providers.

The Turbo Codec, a product of the company's Comtech Communications subsidiary in Tempe, Arizona, is an option for Comtech's CDM-550-T digital satellite modem in forward error correction applications. Fred Kornberg, president and chief executive officer of Comtech Telecommunications, said the Turbo Codec performed up to specifications in both trials, achieving significant bandwidth savings without the power increases that alternative methods require.

In a trial with the Shinawatra Satellite Public Co., Ltd., of Thailand, a CDM-550-T modem equipped with the Turbo Codec was used in a new network providing Internet services for sites outside the company's Bangkok hub.

The second trial, also successful, involved Data Marine Systems, a major supplier of marine stabilized VSAT systems based in Aberdeen, Scotland.

"The success of these trials, though certainly not unexpected, is very significant," Mr. Kornberg said. "It demonstrates the Turbo Codec really does deliver the performance improvements and savings it was developed to provide. This is important for the customers who can benefit from our ability to provide better and better modem options, and it's important for Comtech because of its potential for generating additional revenues in the future."

The Turbo Codec enables users of the CDM-550-T modem to save both bandwidth and transmitting power while obtaining the desired bit error rate in SCPC, MCPC or DAMA applications. It uses only 60 percent of the bandwidth of a comparable rate 1/2 Viterbi/Reed-Solomon concatenated coding scheme and typically operates at 0.5 dB less power through the satellite.

The Turbo Codec also will enable satellite networks currently using the concatenated Reed-Solomon FEC to reduce transmission costs by up to 40 percent with improved signal-to-noise margin. Half rate concatenated Viterbi/Reed-Solomon Codecs stop working altogether when the signal-to-noise ratio degrades below 4 dB because of rain fade or other system changes. By contrast, Turbo Codec will continue to operate below 2 dB, significantly reducing system outages. Turbo Codec also has one-third the transmission delay of half rate Viterbi/Reed-Solomon, making it ideal for Telephony and Internet routing applications.

For satellite networks presently using 8-PSK/TCM modulation and Reed-Solomon coding to reduce transmission bandwidth, Turbo Codec provides nearly the same bandwidth but requires 3 dB less power for identical bit error rate (BER) performance. Lower power significantly reduces the cost of data transmission by lowering satellite power-bandwidth costs and satellite earth station costs through the use of smaller dishes or lower power amplifiers.

In addition to the Turbo Codec trial, Data Marine Systems tested the Automatic Uplink Power Control (AUPC) feature of the CDM-550-T. This feature allows the user to compensate for rain fade and other atmospheric disturbances automatically. With specially designed software, the modems at each end of the link communicate with each other and automatically increase or decrease the output power on the uplink. Transmission Path Control parameters are built in to prevent exceeding of the allowed transmit power to the satellite. The AUPC feature also provides a convenient way to monitor the remote site BER at the hub location.

Mr. Kornberg said the innovations introduced by Comtech Communications - not only the Turbo Codec but also automatic uplink power control (AUPC) and embedded distant-end monitor and control (EDMC) software - are examples of leadership in digital satellite modem design. "They're also results of our company's dedication to providing modem users with the latest and best technology," he said.

Comtech Communications Corp. manufactures a broad spectrum of frequency up and down converters, solid state power amplifiers, satellite modems and C-band transceivers that meet or exceed the standards published by Intelsat, Eutelsat, Insat,

AsiaSat and other worldwide and regional satellite networks.

Comtech Telecommunications, Corp., through its operating units, is a broad-based supplier of packet data communications services, state-of-the-art solid state high power amplifiers and high technology satellite and over-the-horizon microwave telecommunication products and systems for commercial and government applications.