LAW OFFICES GOLDBERG, GODLES, WIENER & WRIGHT

1229 NINETEENTH STREET, N.W. WASHINGTON, D.C. 20036-2413

HENRY GOLDBERG JOSEPH A. GODLES JONATHAN L. WIENER LAURA A. STEFANI DEVENDRA ("DAVE") KUMAR (202) 429-4900 TELECOPIER: (202) 429-4912

e-mail: <u>general@g2w2.com</u> website: www.g2w2.com

HENRIETTA WRIGHT THOMAS G. GHERARDI, P.C. COUNSEL

THOMAS S. TYCZ* SENIOR POLICY ADVISOR *NOT AN ATTORNEY

March 31, 2009

Filed Electronically

Ms. Marlene H. Dortch Federal Communications Commission 445 12th Street, SW Washington, DC 20554

> Re: Call Sign E960132 File No. SES-MOD-20081223-01705

> > Call Sign E960622 File No. SES-MOD-20081223-01704

Dear Ms. Dortch:

In a letter dated March 12, 2009, the International Bureau requested additional information concerning the above-captioned applications, filed by Iridium Satellite LLC and Iridium Carrier Services LLC (collectively, "Iridium").¹ This letter provides the additional information requested in the Bureau's letter.

The digital signal processor used in OpenPort is a multi-processor array and has significantly greater computational power than the processor used on earlier designs. The DSP has been scaled to have sufficient processing power for the multi-channel waveform. The DSP processing power in OpenPort is 150,000MIPS vs. 150MIPS for

¹ Letter from Scott A. Kotler, Chief, Systems Analysis Branch, to Joseph A. Godles, counsel for Iridium.

Marlene H. Dortch March 31, 2009 Page 2

other Iridium single channel products which eliminates any possibility of signal processing overload.

OpenPort uses a new directional antenna array so that transmitter energy is directed towards the satellite in view. The combination of antenna gain and lower transmitter power means that the maximum EIRP on each channel never exceeds that used on earlier designs and is usually lower by up to 6dB. The OpenPort uses forward error correction to allow it to use lower EIRP than previous products.

The mean RF power of an OpenPort transmitter is actually lower than Iridium's other single channel products even when all channels are active. A new RF Power Amplifier was designed for this terminal with sufficient power capability to ensure the handling of the multi-channel waveform without distortion (clipping) thereby preventing intermodulation interference noise in adjacent bands and channels. The type approval testing performed on OpenPort confirmed this aspect of the design.

OpenPort uses transmitter power control to keep the total terminal power constant. As the number of active channels increases the total terminal power is held constant by a combination of signal processing and closed-loop power control.

Please direct any questions concerning this matter to the undersigned.

Sincerely,

Joseph A. Godles Attorney for Iridium

cc: Scott A. Kotler, FCC Hsing Liu, FCC