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By Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, NW
Washington, DC 20554

Re: *In the Matter of Progeny LMS, LLC, Petition for Waiver of the Rules and Request for Expedited Treatment, WT Docket No. 11-49: Ex Parte Communication*

Dear Ms. Dortch:

I am writing on behalf of Texas Instruments Incorporated ("TI") to urge the Federal Communications Commission ("FCC" or the "Commission") to require Progeny LMS ("Progeny") to conduct additional interference testing before authorizing Progeny to commence commercial operations using its Multilateration Location and Monitoring Service ("M-LMS") systems. As a condition of the order waiving two technical service rules at Progeny's request, the FCC required Progeny to conduct actual field tests to assess the potential for interference from its M-LMS systems to Part 15 devices.¹ If significant interference concerns were raised as a result, the Commission reserved the right to take additional action as necessary, including requiring Progeny to turn off the service.² To date, Progeny's testing has been inadequate and the limited testing that has occurred revealed significant interference in some cases.³ We urge the Commission to require additional testing to avoid adverse, unintended impacts on innovative Part 15 products and services.

¹ *Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Service Rules*, WT Docket No. 11-49, Order, 26 FCC Rcd 16878 ¶¶ 25, 29 (2011) ("In granting these waivers, we are not revising other interference-related requirements applicable to M-LMS operations. . . . Included in these rules is the obligation, set forth in Section 90.353(d), that Progeny demonstrate through actual field tests that its M-LMS system will not cause unacceptable levels of interference to Part 15 devices. . . . As an additional condition of this order, we require Progeny . . . prior to commencing commercial operations, to file a report . . . that . . . demonstrates that its M-LMS system will not cause unacceptable levels of interference to Part 15 devices that operate in the 902-928 MHz band.")

² *Id.* at ¶ 29 ("If no significant interference issues are raised, we will promptly notify Progeny that it may commence commercial operations. If, however, significant interference concerns are raised, we will determine what additional steps may be appropriate. Finally, we reserve the right to require Progeny to take any necessary remedial action, including turning off its service, if we find that its network operations are causing unacceptable levels of interference to Part 15 users in the 902-928 MHz band.")

³ *Request by Progeny LMS, LLC for Waiver of Certain Multilateration and Monitoring Service Rules*, Notice of Ex Parte Communication of the Part 15 Coalition, WT Docket No. 11-49 (filed May 1, 2013).

TI is one of the largest semiconductor manufacturers in the world. More specifically, TI is a leading supplier of analog ICs and embedded processors. As the Commission knows, TI is also a leading supplier of low-power radio frequency (“RF”) transceivers and system-on-chip devices for short and long range applications, mesh and IP networks, personal area networks, positioning solutions, sub-1 GHz and 2.4 GHz RF solutions, and RFID. Target applications for the low-power RF solutions include alarm and security, industrial and home automation, medical and health, metering and smart energy, portable consumer and enterprise, remote controls and wireless audio.

TI has long recognized the importance of the unlicensed 902–928 MHz band. The availability of this unlicensed spectrum has led to a wide variety of innovative technologies that provide enormous societal benefits. Moreover, as these technologies have become embedded in everyday life, the importance of the unlicensed 902-928 MHz band has, if anything, only increased.

Progeny’s M-LMS system has the potential to interfere with a wide range of critical unlicensed devices and applications that operate in the 902-928 MHz band. For example, products vital to health and safety (such as several emergency call pendants and home security systems) operate in the 902–928 MHz band. These systems must work when needed and interference from Progeny systems could result in personal injury or even loss of life. Another critical unlicensed application is smart electronic metering used by utilities to remotely and automatically monitor electrical grid information. Millions of such devices have been deployed and become embedded throughout the nation’s electrical grid infrastructure in recent years. To maintain the robust operation of the electrical grid, these meters must be read with high reliability, typically in excess of 99%. As such, rigorous testing prior to commercial deployment of Progeny’s system is needed to ensure that the proposed Progeny devices will not cause unacceptable interference to such Part 15 devices.

Thus far, Progeny’s testing has been very limited. For example, Progeny has only tested two types of smart metering equipment and only one type of equipment used for wireless services.⁴ Progeny has not conducted any tests on supervisory control and data acquisition equipment or distribution automation equipment in the 902–928 MHz band.⁵ Moreover, in some cases, the limited testing Progeny has conducted showed a significant negative impact on existing Part 15 devices. For example, wireless service providers observed a 50% reduction in throughput, which would effectively preclude wireless internet service provider operations where Progeny’s system is fully built out.⁶

Progeny has steadfastly refused to conduct more extensive testing that could illuminate the interference implications of operating its M-LMS system. Specific requests for additional testing have been made by Taggle Systems, Inovonics, GE Digital Energy, Plantronics, and EZPass, but have been uniformly ignored. TI urges the Commission to defer authorizing Progeny’s operation of its M-LMS systems and to require additional testing. Progeny should be required to prove that its systems do not cause unacceptable interference to existing 902-928 MHz Part 15 devices.

⁴ *Request by Progeny LMS, LLC for Waiver of Certain Multilateral and Monitoring Service Rules*, Notice of Ex Parte Communication of Utilities Telecom Council, WT Docket No. 11-49 (filed May 20, 2013).

⁵ *Id.*

⁶ *Request by Progeny LMS, LLC for Waiver of Certain Multilateral and Monitoring Service Rules*, Notice of Ex Parte Communication of the Part 15 Coalition, WT Docket No. 11-49 (filed May 1, 2013).

In summary, any risks that Progeny's systems pose to Part 15 technologies in the 902–928 MHz band should be fully understood and considered before such systems are allowed to be deployed. We urge the Commission to require additional testing or, at a minimum, impose strict and meaningful requirements on Progeny's system, to help ensure that interference is minimized for unlicensed users in the 902–928 MHz band.

Respectfully submitted,

A handwritten signature in cursive script that reads "Paula J. Collins".

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