September 6, 2023

To: David Law, IEEE 802.3 Ethernet Working Group Chair, and participants of the IEEE 802.3 Ethernet Working Group

cc: Adam Healey, IEEE 802.3 Ethernet Working Group Vice-Chair; John D'Ambrosia, IEEE P802.3df/dj Task Force Chair; Mark Nowell, IEEE P802.3df/dj Task Force Vice-Chair

Subject: Ultra-Ethernet Consortium introduction

From: J Metz, Ultra Ethernet Consortium Chair [redacted]

Dear Mr. Law and participants of IEEE 802.3 Working Group,

We wish to inform the IEEE 802.3 Working Group of the formation of the Ultra Ethernet Consortium (UEC), an industry body focusing on exploring and specifying optimizations for Ethernet-based networks supporting Artificial Intelligence (AI) and Machine Learning (ML) workloads.

The Consortium is a member-company based organization and details can be found on our website (https://ultraethernet.org ) or in our whitepaper (https://ultraethernet.org/wp-content/uploads/sites/20/2023/07/23.07.12-UEC-1.0-Overview-FINAL-WITH-LOGO.pdf).

The focus of the UEC is mostly above the Physical Layer work of IEEE 802.3 Ethernet Working Group but to address potential aspects of the physical layer, we request to create and maintain a liaison relationship with 802.3.

We would initially like to make the observation that AI/ML networks have a higher sensitivity to latency and tail latency and, due to the high-density parallel nature of the networks, a higher sensitivity to data reliability. We would encourage the IEEE 802.3 Working Group to keep these network requirements in mind as they progress their work.

Yours sincerely,

[redacted]

J Metz, Ph.D

Chair, Ultra Ethernet Consortium