

Feb. 23<sup>rd</sup>, 2015

Zhongren Cao  
C-3 Comm Systems, LLC  
P. O. Box 871  
Vienna, VA 22183

RE: Letter of Support for SBIR A15-020 Wireless Networking Using Multiple Antenna Interference Alignment

Dear Zhongren:

General Dynamics is pleased to support the C-3 Comm Systems LLC proposal for phase I Self-Organizing Interference Alignment (SOIA) for Tactical Mobile Ad Hoc Communications Networks. In this proposal, C-3 Comm Systems is designing efficient algorithms to enable distributed clustering of multiple transceiver pairs for interference alignment in practical tactical mobile ad hoc networks. Such development will support significant network-wise throughput improvement for tactical communications in mobile edge networks by allowing multiple transceiver pairs to be active at the same time.

General Dynamics Mission Systems delivers tactical mission systems to the DOD, leveraging technologies that provide decisive advantages to the warfighter by designing, developing, engineering and integrating mission planning and management systems. General Dynamics is a prime contractor for several programs of record to which the subject technology can support such as the JTNC Handheld, Manpack, Small Form Factor (HMS), Warfighter Information Network-Tactical (WIN-T), Command Post of the Future (CPOF), and PROPHET, the Army's tactical SIGINT system.

General Dynamics will closely monitor progress and examine the potential for transition into tactical PORs and/or use in GD products and programs. GD-MS has an active relationship with a number of DOD agencies and programs for which there is a potential future application of this technology and will support MSI in Phase II of this program to provide decisive advantages to the warfighter. GD-MS will be pleased to consider playing in an active role in the Phase II of this program as there are viable transition potentials for this technology to several programs such as HMS AN/PRC-154 Rifleman Radio.

General Dynamics will collaborate with C-3 Comm Systems to benefit from available Visioneering resources and expertise that are available to expedite transition.

Please feel free to call or email: (480) 441-5147; [Sam.Khoury@gd-ms.com](mailto:Sam.Khoury@gd-ms.com)

Respectfully,

/s  
Sam Khoury  
Advanced Research & Development Programs  
General Dynamics Mission Systems