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**Addendum to “Mapping the Multi-Layered Additive Manufacturing (AM) Community: Understanding the Future Landscape and Implications for National Security”**

**Appendix: “Deliverables”**

This project enhances both our understanding of additive manufacturing and counter-proliferation and our broader ability to identify, track, and engage with disruptive communities of innovation (COIs) in general. One point to emphasize – this tool is not restricted to additive manufacturing (or any particular technology or innovation), but can be flexibly repurposed to multiple domains. It ties in with broader funding streams and research efforts currently being conducted by the principal investigators for the Department of State and the United States Marine Corps.

The core deliverable of this project is a multi-use platform, tentatively titled *InnovateNET,* that automatically gathers and formats data from different COIs and presents these data as network structures for visualization and analysis. InnovateNET is built using only open-source data and technology, broadening the base of potential end users and avoiding restrictions based on copyright, licensing, or subscription. Although the current project leverages InnovateNET to construct and analyze the COI focused on additive manufacturing, this is only one use case for this tool. Because InnovateNET is a query-based platform, users can tailor new queries to analyze COIs in other areas. A logical extension of this initial funding effort is to use InnovateNET to analyze additional communities of innovation such as biotechnology, drone development, or alternative fuels research.

The InnovateNET effort also ties in naturally with another line of effort in DA, the Coalition for Open-Source Defense Analysis (CODA). Jesse Hammond is co-PI with CODA’s leader, Camber Warren, on a project application being developed through the Naval Postgraduate School Foundation. If funded, CODA’s efforts will synergize with InnovateNET by developing large-scale machine-learning algorithms that can analyze community network structures and identify early signs of disruption, emergent sub-communities and coalitions, and other dynamical aspects of COI networks.

Deliverables:

* Initial version of InnovateNET platform
* Presentation and demonstration to be held at CWMD Systems (or other venue(s) according to the sponsor’s needs)
* Proof of concept report focused on a portion of the AM innovation domain (scoped using detailed analysis and guidance provided by MITRE team)