

# Additive Manufacturing (AM) Business Model Wargame II

*Discovering Business Processes Critical to Enabling AM*



**America Makes**

**Dates:** 16-17 May 2017  
**Location:** Lockheed Martin Corporation – Global Vision Center  
2121 Crystal Dr., Arlington, Virginia 22202  
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## Additive Manufacturing Wargame II – The Simulation at a Glance



This Business Model Wargame II is a follow up to the initial Business Model Wargame held at the Lockheed Martin Center for Innovation in 2016. The purpose of the sponsoring Additive Manufacturing Business Model Working Group is to address the business model aspects of additive manufacturing for sustainment and production consistent with public private partnership principles in parallel to additive manufacturing technical community efforts. Scope includes the commercial aspects of the transaction, communication, and Government – industry - academia relationships. The DoD roadmap published in 2016 confirms to need for this focus. The scenario for Wargame II has been expanded to include the life cycle platform considerations to further develop the necessary business environment to support the continued adoption of Additive Manufacturing (AM) capabilities to benefit the Warfighter in parallel to technology focus.

## A Few Points for Consideration Identified at Wargame I and DoD Roadmap Value Chain



- Address Roadmap Value Chain Business Practices regarding Intellectual Property, Data Rights and Contracting Issues specific to AM. Further AM ecosystem for business models and partnering options.
- Address cyber infrastructure and cyber security - risks to industrial base / business viability, intellectual property, technical data packages.
- Legal and Liability Considerations – legal concerns and liability from point of shift from industry to government including, qualification and certification timeline, field service representative options and roles, and brand/reputation.
- Cost models and decision tools - revenue stability & predictability, pricing models, and fair price / profitability

## You Are Invited - Join Government, Industry, and Academia/Non-Profit Leaders



Business Model Wargame Working Group leadership is inviting Government, Industry, and Academic/Non-Profit key to actively participate in the wargame (See registration site at <http://www.ncms.org/XXXX>). The wargame presents an opportunity for AM leaders and functional stakeholders to work through a simulated acquisition process to collaboratively develop business model alternatives and develop ecosystem solution alternatives.

## Summary of the Wargame Scenario

This is the pre-quel to the original AM BM WG scenario that formed the basis of the 2016 AM BM WG. The DoD issued a RFP to develop and acquire a light-weight reconnaissance drone capable of being deployed by a 2-person team in austere environments. The timeline defined by DoD is aggressive. DoD requires the awardee to produce a prototype within 6 months and the first production unit within a year after contract award. Most of the performance capabilities required by DoD can be performed by commercially available systems, but some of the reconnaissance features will have to be developed jointly by the Gov't/Industry team and some of the capabilities will be provided by the Gov't team which cannot share the base technology with the drone manufacturer. The scenario will address deployed AM business models.

### Schedule for May 16<sup>th</sup> and 17<sup>th</sup>:

#### Day One (8AM to 5:00pm)

- Integrated Government/Industry/Academia teams assigned to 1 of 4 business model options
- Teams include representatives from all functional areas to address requirements and develop approach
- Networking Session comparing approaches developed by teams for Day One moves

#### Day Two (8am to 4pm)

- Additional moves
- Networking Session comparing approaches recommended by teams for Day Two moves

