

Supply Chain SWG Workstream Development

CDLS Tasker Additive Manufacturing - Task Mandate

Version Control

Version Number	Description	Date	Comments
0.1	Initial content creation for approval	09 Jun 21	
0.2	Minor amendments	5 Jul 21	

Governance

Under governance of the DefSp Supply Chain SWG

- Co-Chairs:
 - MOD: Lt Cdr Rachael Jewell
 - Def Sp Advocate: Lt Col Mike Potter
 - Industry: Vacant
- Task Group Lead:
 - MOD: Richard Hamber
 - Industry: Phill Dickens
- TD Info Support: Steve Green

Background and Requirements

CDLS has tasked Def Sp Tx Innovation Team Leader to undertake pre-discovery work to test the feasibility of pursuing 'Additive Manufacturing (AdM) as a Service' through an Industry provider(s). There are several related but independent internal MOD investments underway in AdM, mainly focused on technical demonstrators in last-mile/ deployed space. This pre-discovery work will investigate the feasibility of an AdM service provided from within the strategic base (in part to address the potential Supply Chain issues with AdM materials) while allowing the more tactical trials to continue. The work will examine the choices available in the marketplace in respect of who should produce components in the context of a centralised strategic base capability, and establish the degree to which the model can be extended into the MOD Supply Chain, building on the work underway in the FLCs/StratCom.

Outcome

The aim of the task set upon the Supply Chain SWG is to provide input to DefSp Innovation Team Leader to inform the subsequent direction of travel notably:

- The maturity of Industry strategies to adopt Additive Manufacturing as a component within their supply chains, the maturity of their implementation plans; and the extent of their current capabilities and planned capabilities. Within this the degree to which they are addressing:
 - Certification
 - IPR
 - cost models
 - information architecture
 - information integrity.
 - Views on where these issues may preclude the strategic base model being extended into the MOD supply chain (to include fixed sites in MOD locations)

and deployed facilities). And what needs to be delivered to make the model extensible.

Deliverables

The SWG is requested to provide:

- A report illustrating the maturity levels of the industry participants supply chain strategies as it reflects the adoption of Additive Manufacturing technologies, the specific technologies being pursued and the range of inventory items being considered. This for both In-Service and pre-production phases, by platform or service.
- A report that illustrates the progress being made in addressing the perceived constraints associated with: certification, IPR, cost models, information architecture and information integrity. The report should high-light progress made in addressing these issues and views on where these issues may preclude the strategic base model being extended into the MOD supply chain (to include fixed sites in MOD locations and deployed facilities). And what needs to be delivered to make the model extensible.
 - The expectation is that this will draw from industry dialogue with up-stream supply chain supplier/ SMEs/ Bureau's.
- The reports will provide a key evidential basis to underpin the emerging strategy that pursues a conscious decision to upscale the adoption of Additive Manufacturing provided as a service from the strategic base as a key channel of the future supply chain.

Task Group

The work is expected to draw from extant Supply Chain members acknowledging that TDInfo can also draw on other industry inputs as required.

Task Duration

8 – 12 weeks, output to inform the next iteration of the draft report.

Communication

1. The outcomes will be presented at the subsequent Supply Chain SWG.
2. The Reports will be available for download from the TDInfo website.

Activities

1. Mobilise – establish team, set up work environment, agree tasks.
2. Conduct discovery - across Defence Industry.
3. Assess the current state of play – cross sector analysis to baseline maturity of technology, the range and scale of take-up, emerging practices, standards
4. Consider the constraints – opportunities, risks, exploitation of current activities, gap analysis, pros and cons.
5. Map out the report - identify issues, propose recommendations, and provide views on the extensibility of the proposed strategic base model into the deployed space.
6. Write the report - populate strawman as task progresses.
7. Peer review – by contributors
8. Communicate and distribute

Ways of Working

- All information will be publicly available
- Content will be created collaborative
- Content is to be peer reviewed and agreed
- Regular touch point 'Teams' calls will be scheduled to assess progress and direct the work