

AM Village 2023

The Additive Manufacturing Village 2023 is planned to be a five-day capability workshop, bringing together industrial Additive Manufacturing (AM) capabilities and military AM experts. The aim is to define military use cases – focusing on deployed military missions - and to identify appropriate AM technologies which can potentially provide logistic advantages to deployed armed forces. The Workshop is planned to be held on 12 – 16 June 2023 in Ede / The Netherlands at the Koninklijke Landmacht’s Fieldlab Smartbase. The Multinational Logistic Coordination Center (MLCC) will support this event in continuation of ongoing cooperation between EDA and MLCC.

Background

EDA’s task is to support its Member States in their efforts to develop defence capabilities and foster military cooperation among the European Union Member States. The Capability Development Plan (CDP) of EDA has identified Additive Manufacturing as a key technology with game-changing potential, especially in terms of reducing the logistic footprint on military missions. AM technologies offer new opportunities in design freedom, light weighting, efficient use of resources, and expanded flexibility in materials, processes, and logistics. These new developments will increase AM’s military use cases and applications in future, marking the technology’s potential in terms of operational benefits.

MLCC is the dedicated discipline leader for the NATO Smart Defence Project 2.1084 “Land Operations and Maintenance”, which aims to develop a “Battle Damages and Repairs Best Practices Catalogue”. EDA-MLCC cooperation has identified that AM technologies have the potential to enhance BDR procedures, enabling a dedicated BDR agenda at AM Village 2023.

Scope

The AM Village 2023 is addressed to military AM experts, military dealing with regular maintenance and repair, and expedient maintenance in all services of Armed Forces. Additionally, the AM Village is targeting AM industry who can provide suitable, robust, and resistant AM technologies, which can be deployed with military standard assets (e.g., 20” containers). The scope of the AM Village 2023, elaborated with supporting EDA Member States, is to:

1. Identify military use cases where AM can potentially improve military logistics.
2. Improve cooperation between Armed Forces and Industry to identify “tailored to the mission” AM solutions.
3. Enforce the cooperation amongst various stakeholders aiming for interoperability regarding AM applications for military purpose.
4. Use the CAT B Project AM for Logistic Support (AMLS) objectives as a guideline getting findings for the development of future common standards.

Objectives

The AM Village 2023 will pursue the following objectives:

- Identifying military use cases, including for Battle Damage Repair (BDR).
- Reviewing AM processes such as engineering, postprocessing and verification.
- Providing a platform for capability demonstrations.
- Reviewing the “Operative AM Connection” of different AM technologies.
- Elaboration of common procedures as targeted by the Cat B Project AMLS.
- Exchange of Experiences and “Best Practice” and “Lesson Learned”.
- Continuing to build up a community and mutual confidence.

Considerations

Lead:	EDA – Capability, Armament and Planning Directorate (CAP) MLCC – Discipline Leader BDR	
Host Nation (HN):	The Netherlands	
Location:	Royal Dutch Army’s Fieldlab Smartbase, Hessenweg 2, 6718 TD Ede	
Date:	12 – 16 June 2023	
Deployment:	12 June 2023 by noon latest (incl. operational readiness) Cross Border Movement on bi-lateral dialog with HN	
Re-deployment:	16 June 2023 at noon earliest	
Classification:	unclassified	
HN Support:	By Royal Dutch Army - upon request	
Budget:	Cost – free Host Nation Support Accommodation, catering, and transport on own costs	
Accommodation:	Responsibility of participants (recommended Hotel by HN)	
Catering:	Lunch provided by HN for a fee	
Communication/IT:	Responsibility of participants	
Internet:	Long Range Wide Area Network by HN	
Medical:	Host Nation Support / established private medical services	
Transport on site:	Responsibility of participants (shuttle service by HN on demand)	
Dresscode:	Uniform or casual	
Meetings ahead:	1 st AM Village Prep Meeting & Site Survey	22/23.02.23 in Ede/NL
	2 nd AM Village Prep Meeting	04/05.04.23 in Prague
	3 rd AM Village Prep Meeting	17/18.05.23 as VTC
	4 th AM Village Prep Meeting	01.06.23 as VTC