LAND

(EL) Main Battle Tank Simulation and Testing Centre (MBT-SIMTEC)

(Established in November 2021)

For Public Release

PROJECT DESCRIPTION

Even though the rapid development of technology has led to state-of-the-art solutions, the main battle tank (MBT) remains the fundamental weapon of maneuver and thus mechanized warfare, especially against hostile MBTs and other heavily armored threats. In this context, Greece, as the biggest operational user of MBTs in the European Union (EU) and the biggest operational user of Leopard-family MBTs worldwide, possesses training facilities specifically developed for MBT simulation-based training along with experienced personnel and about half a century's experience on MBT simulation solutions; it is thus more than qualified to successfully conduct said type of training. Contributing significantly to the development of EU's capabilities in the mechanized warfare domain and especially in the "MBT Focus Area", Greece proposes the creation of a Main Battle Tank Simulation and Testing Centre (MBT-SIMTEC).

OBJECTIVES/PRODUCTS

The project aims at developing an innovative simulation-based training and research center, which through practical training and operational research, will eventually be able to:

In short-term:

- Provide both crew and tactical training on LEO 2HEL (A6+), LEO 2A4, LEO 1A5 MBTs and other types of concurrent weapon systems (ex M901 ITV).
- Test and standardize new tactics for MBTs in mechanized warfare.

In mid-term:

- Network with other existing Training Simulation Facilities of EU Member States or Third Parties (Ex. US Army, Swiss Army).
- Create a state-of-the-art Battle Lab, with a focus on mechanized and maneuver warfare in general, in order to promote and enhance development of new Concepts, Doctrines and Tactics Techniques and Procedures (TTPs).
- Enhance the quality and reliability of measurable data produced by the interconnected simulation systems of all types, via the development and employment of Artificial Intelligence (AI) monitoring algorithms.

In long-term:

- Develop a modular Common Simulation-based Training Architecture [Common SIMBAT Architecture – CSA], based on COTS hardware and serious games software, to either integrate in upgraded legacy systems or use as a backbone for newly designed systems.
- Acquire the capability to determine and validate main and secondary specification of newly designed subcomponents of MBT Fire Control Systems, Command – Control – Communications – Computer – Information systems (C4I), Active Protection Systems, Situational Awareness and decision aiding systems.
- Create an in-house mechanism/instrument (tool) for providing solutions over shortfalls that may occur in future platforms.

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IDEATION
INCUBATION
EXECUTION
CLOSING

Contribution to the more binding commitments
Yes

Capability Perspective

EU CDP priority
Ground Combat Capabilities
Cohesive and Well-Trained Militaries

CARD references
Main Battle Tanks

Operational Viewpoint

HICG
Common Exercises & Training
Enhanced Education and Training Enablers, and Facilities

EDA support

No

INDICATORS

Project Execution Year (PEY) and Project Completion Year (PCY):

DELIVERABLES ACHIEVED

- Harmonization of Requirements.
- Overall project roadmap produced.
- Critical components of infrastructure identified (constructive simulation software, systems to be upgraded).

CRITERIA FOR SUCCESS

- Provide a common simulation training and exercise for the EU pMS in coherence with NATO.
- Harmonize doctrine, tactics, procedures and drills in the use of the MBT in mounted warfare among the EU member States.
- Contribute to the development of a common European MBT operational culture.
- Provide a mechanism for testing existing and future doctrine/tactics in MBT used in mounted warfare.
- Provide a mechanism for testing existing and future MBT platforms at system/subsystem level.
- Design and develop a modular MBT simulation system based on COTS hardware equipment and software and/or facilitated by Artificial Intelligence.