

GHOSTPLAY Tactical AI for defense — Simulating the unpredictable

- GhostPlay simulates Al-based decision scenarios in defense at machine speed – reinforcing tactical superiority. Novel, superior courses of action can be developed by simulating complex military battle scenarios. As a result, flexibility and superiority can be achieved at the strategic, tactical and operational levels.
- GhostPlay simulates the unpredictable. Decisions are simulated under uncertainty. Decisions can thus be made advantageously on the basis of incomplete information and under time pressure.
- GhostPlay is unique, leading and made in Germany: GhostPlay uses third wave artificial intelligence – unique and leading in Germany. Context-sensitive decision-making and action can thus be achieved. This allows cognitive decision superiority in mission command and control of the future. As a result, command and control systems are accelerated while increasing their effectiveness.
- GhostPlay closes capability gaps for the Bundeswehr / German Armed Forces. As a consortium, GhostPlay combines the expertise and domain knowledge of experts: HENSOLDT Sensors, 21strategies, Helmut Schmidt University, and BCR Consulting.

GhostPlay key features – unique, leading, made in Germany

01	Simulating tactical artificial intelligence for defense
02	Third wave artificial intelligence allows context sensitive decision-making and action
03	Decisions under uncertainty – multi-step decisions based on incomplete information under time pressure are enabled
04	Closing a capability gap – in development for the Bundeswehr / German Armed Forces already
05	Consortium consisting of long-standing experts in their domains
06	Integration of realistic sensor data from HENSOLDT Sensors with Al Training environment
07	Scientific evaluation on the side of Helmut Schmidt University / University of the Bundeswehr / German Armed Forces

Benefits from GhostPlay



Multi-domain emergent algorithmic decision-making provides for speed and tactical superiority

GhostPlay simulates tactical Al for defense.

The focus is on simulating Al-enhanced integrated air defense systems (IADS). Through interaction with its opponents, a simulated Al-enhanced ground-based air defense trains and demonstrates possible defense tactics against drones, drone swarms or helicopters simulated. Cognitive Al interacting with different adversary performance profiles generate novel defensive tactics. Executed at machine speed, they shorten decisionmaking and cycle sensor-to-shooter.

Effective multi-domain defense.

An effective and coordinated use of defensive strategies by all military forces involved. Not only individual aspects are evaluated, but strategic-tactical action in a network.



Battlefield simulation with drone swarms and air defense

Consortium partners

HENSOLDT)

Til 21strategies

BORCHERT



Funding partner

Zentrum für Digitalisierungs- und Technologieforschung der Bundeswehr



Headquarters

Lilienthalstraße 27 85399 Hallbergmoos Germany Prof. Yvonne Hofstetter · CEO, Co-Founder

yvonne.hofstetter@21strategies.com +49 811 88.99.73.56 www.21strategies.com