





CYBER, C4ISR

# (PT) Automated Modelling, Identification and Damage Assessment of Urban Terrain (AMIDA-UT)

(established in November 2021)

For Public Release

## **PROJECT DESCRIPTION**

Project based on a digital 3D mapping system (of systems), mainly designed to identify urban targets (buildings or other built structures).

Architecturally, it consists of isolated, or several, coordinated / autonomous drones, with multisensory payloads, complemented with vehicle/soldier-attached sensors and even space-based sensors for earth observation (SBEO), which collect and send the necessary data to a land-based station, that is processed afterwards (it may consider the use of cloud computing and AI), to create digital models of the terrain and to identify and characterise building structures (construction materials, typical layouts and structural systems) automatic and autonomously. From this product, and through the fusion of information from other sources (e.g. satellite image), a set of decision support services and computer applications can be developed in the areas of targeting, manoeuvre, Force Protection, or training (simulation).

#### **OBJECTIVES/PRODUCTS**

The main objective of this project is to create an automated system/equipment/tool for improved and faster mapping and identification of target structures, as well as to support and improve the operational effectiveness of planners, weaponeers, modelling and simulation analysts, battle damage assessors and commanders, in the decision-making process, or to support training activities. In the short term, the objective is to define the CST and CSR, promoting the utility and operational value of the products and by-products to be developed, at the level of the pMS, as well as to EDTIB. In the medium term, develop a strengthened Feasibility Study to promote the largest number of financing and co-financing options, namely the use of EDF for R&D purposes. In the long term it is intended that the product or by-products is/are accepted, useful and ready for use in an interoperable manner in CSDP operations.

## **INDICATORS**

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



#### **DELIVERABLES ACHIEVED**

- Terms of Reference (ToR)
- Draft Common Staff Targets (CST) and Draft Common Staff Requirements (CSR).
- Feasibility Study/Preliminar Technological Demonstrator

#### **CRITERIA FOR SUCCESS**

• Create a system/equipment/tool for different purposes in operational effectiveness and supporting training activities.







IDEATION INCUBATION EXECUTION CLOSING



Yes

Capability Perspective

**EU CDP priority** Information Superiority

CARD references Soldier Systems Focus Area

Operational Viewpoint



Land ISTAR; Indirect Fire Support; Air Precision Strike-Unmanned; C-IED

