

ALFA

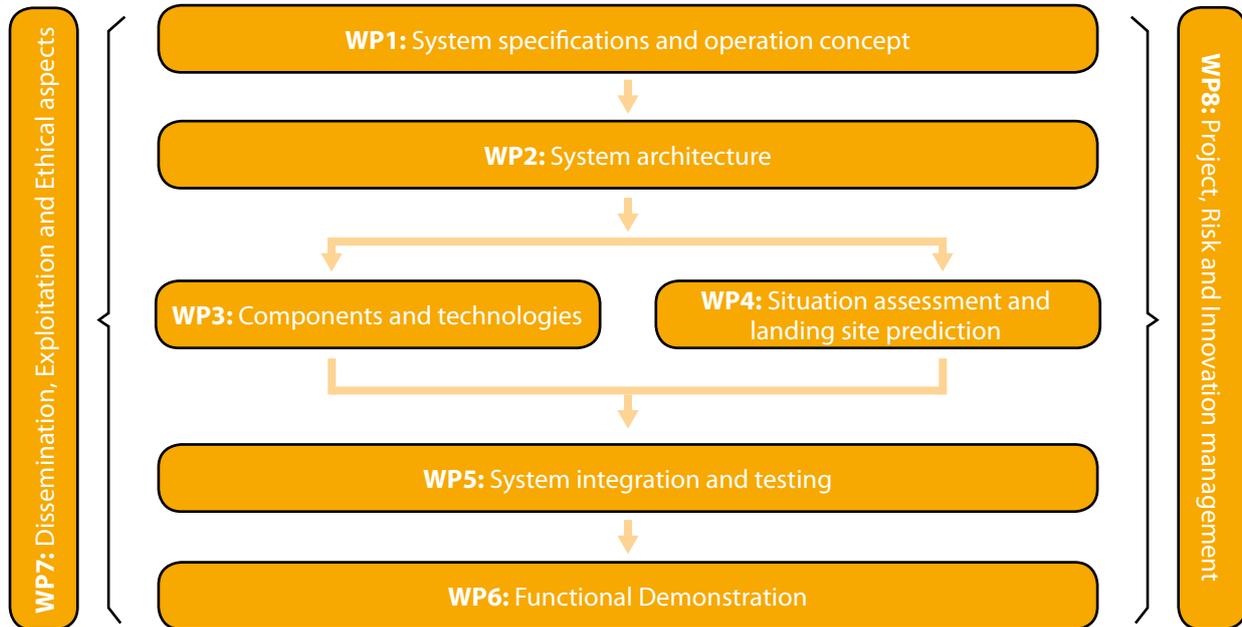
Advanced Low Flying aircrafts detection and tracking

Project reference: **700002**
Project website: **www.alfa-h2020.eu**
Project start: **1st January, 2017**
Project duration: **3 years**
Total costs: **EUR 4.613.831,25**
EC contribution: **EUR 4.613.831,25**



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Technical Approach:

ALFA is planned to run for 36 months. It is organized into eight work packages (WPs) with significant dependencies and expected synergies between them which are described shortly in the following:

WP1: System specifications and operation concept

This work package is a foundation point for ALFA execution. It will define the end user requirements as well as existing technology gaps. The main objective is to detail the operational gap in detection of small smugglers' aircraft entering European borders, identifying operational requirements and potential future menaces.

WP2: System architecture

WP2 will define a maritime border surveillance system architecture optimized for the detection of small, low flying aircraft of different types including small aircraft, helicopters and drones.

WP3: Components and technologies

The overall objective of this work package is to achieve the necessary development for detection capabilities beyond state of the art according to findings of WP1. Detection, classification and identification will be brought up to a level needed for successful data fusion and Situational Awareness of WP4. To complement the radar localization capabilities, the feasibility of radiolocation and passive radar will be shown.

WP4: Situation assessment and landing site prediction

WP4 defines and develops functions for threat assessment and the build-up of situational awareness through the use of sensor information, for the calculation of the optimal observation position of ALFA assets, for the prediction of landing zones and for the presentation layer of ALFA.

WP5: System integration and testing

This WP focuses on the implementation and integration of complete sensor and computing suite and preliminary testing. The suite contains radar, electro-optical sensors passive RF receivers, etc. from WP3 and WP4.

WP6: Functional Demonstration

WP6 will address a demonstration of the fully functional ALFA system to EU, end users, relevant industries and other relevant parties.

WP7: Dissemination, Exploitation and Ethical aspects

This WP obtains input from other WPs focusing on scientific research and ensures the communication and dissemination of results achieved within the single WPs to the outside parties as well as to participating entities. WP7 will further support the partners to exploit the achieved results and impact the European and international market. The ethical and societal impact of the project will be closely monitored and reported on.

WP8: Project, Risk and Innovation management

WP8 monitors and guides other WPs in order to ensure a successful project execution with respect to risk- and innovation management. The management WP shows dependencies to all other WPs as it coordinates and ensures that the tasks are in line with the project work plan in order to reach the common goal of ALFA.

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Consortium:

The consortium of the ALFA project brings together a European team of recognized organizations from various backgrounds, making it well-positioned to achieve its objectives. All in all there are 9 partners from 6 different European countries (Austria, The Netherlands, Portugal, Italy, Spain, Germany) including 3 industrial partners, 1 SME, 1 university, 2 research institutions and 2 government agencies.

Project Partners:



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