



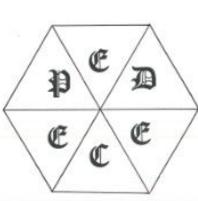




Institute for Sustainable Society and Innovation



Universitat Autònoma de Barcelona





EvoATM

EvoATM project is aimed to design and test a strategic design support tool based on a methodological framework to better understand how architectural and design choices influence the ATM system and its various behaviours, and vice versa.

EvoATM is integrating knowledge in ATM modelling with **AGENT-BASED EVOLUTIONARY computing**, in order to build a model representing the whole of ATM system components.

The project outcome will be a solver which finds an optimal tuning of the design of new/modified ATM components to accomplish the expected performances.





EvoATM Open Demostrator

It's an evolutionary agent-based modelling Open Demonstrator for change design and impact assessment in ATM.

A novel cost-effective platform to support the achievement of ATM performance targets through **STRATEGIC THINKING**.



SUPPORT TO STRATEGIC THINKING

EvoATM model and platform are based on the following design approach:



Application of an agent-based modelling paradigm to represent the components of the Direct Route and the Free Route (FR) environment.



Set-up the proper performance indicators at system level and at component level for each modelled ATM technical and human component.



Drafting of a set of methodological guidelines in order to extend the experimented framework to any generic section of the ATM system.



Definition and application of an analysis paradigm in order to to support the strategic thinking, intended as the decision process to assess which part of the ATM system needs

EVOATM OUTPUT



An Open Demonstrator implementing a specific subsystem of ATM demonstrating the effectiveness of the EvoATM approach which will represent a test case, suitable to be applied to other ATM parts.



An innovative methodological approach to the change process.



A unique formalism taking advantages from combined multiple formalisms to address the specific EvoATM environment.



PROJECT OVERVIEW

EvoATM project started on the 01/01/2018 and will finish on the 31/12/2019. Project timeline is based on 4 milestones and 6 work packages. Visit us at www.evoatm-project.eu to get news and achievements on EvoATM

