



# Greener Air Traffic Operations Project

## Project Objectives

- Development of new concepts for greener air traffic in cooperation between Europe and China
- Implementation of enhanced decision support tools to enable greener gate-to-gate trajectories
  - Fusion of on-board and ground based information
  - New avionic technologies for greener long haul and short haul operations
- Tackling key methodologies and technologies
  - Setup of a comprehensive simulation environment (Fast-time and real-time with human-in-the-loop)
- Validation of operational performance and environmental benefits
  - Development of joint measures for environmental and climate impact
  - Joint assessment of environmental impact

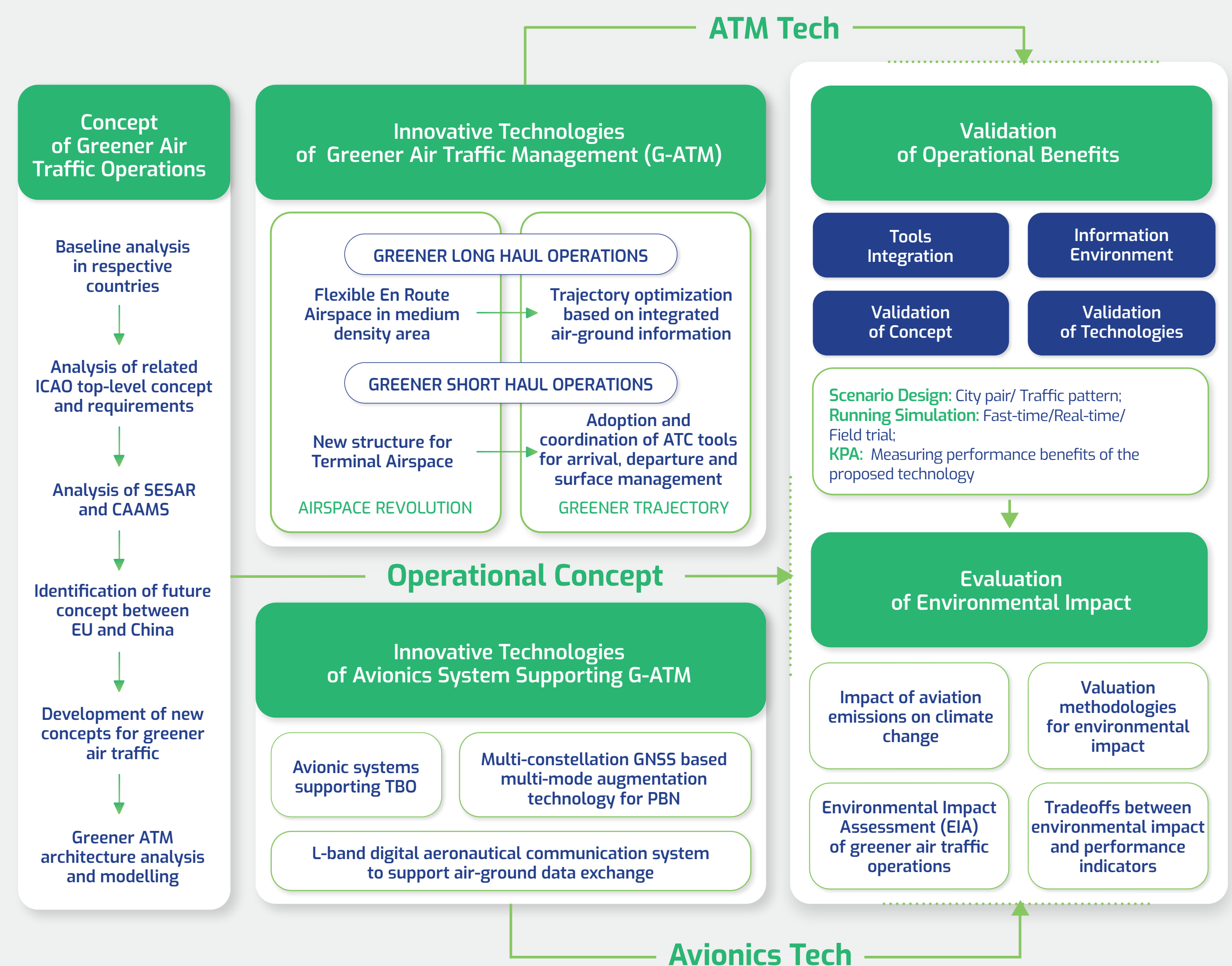


## Concept & Methodology

The overall concept of the GreAT project is the implementation of greener procedures for enroute, approach, taxi, and departure operations. To fulfil the ambitious objectives, the project is divided into nine main work packages with specific topics, covering the spectrum from the initial concept research and development work towards the environmental impact assessment and the exploitation of results.

### Main workpackages

- Project Management
- Concept of Greener Trajectory Based Operations
- Greener Long Haul Operations
- Greener Short Haul Operations
- Supporting Avionic System
- Validation of Operational Benefits
- Evaluation of Environmental Impact
- Dissemination and Exploitation
- Ethics



## Impact... ...on short haul operations

### Ground side

- Continuous steady taxiing
- Reduced waiting times with engine running

### Air side

- Shortening route through direct approaches
- Avoid holdings by required time of arrival
- Use always continuous descent/climb operations
- Avoid long transitions
- Take disturbances into account

## ...on long haul operations

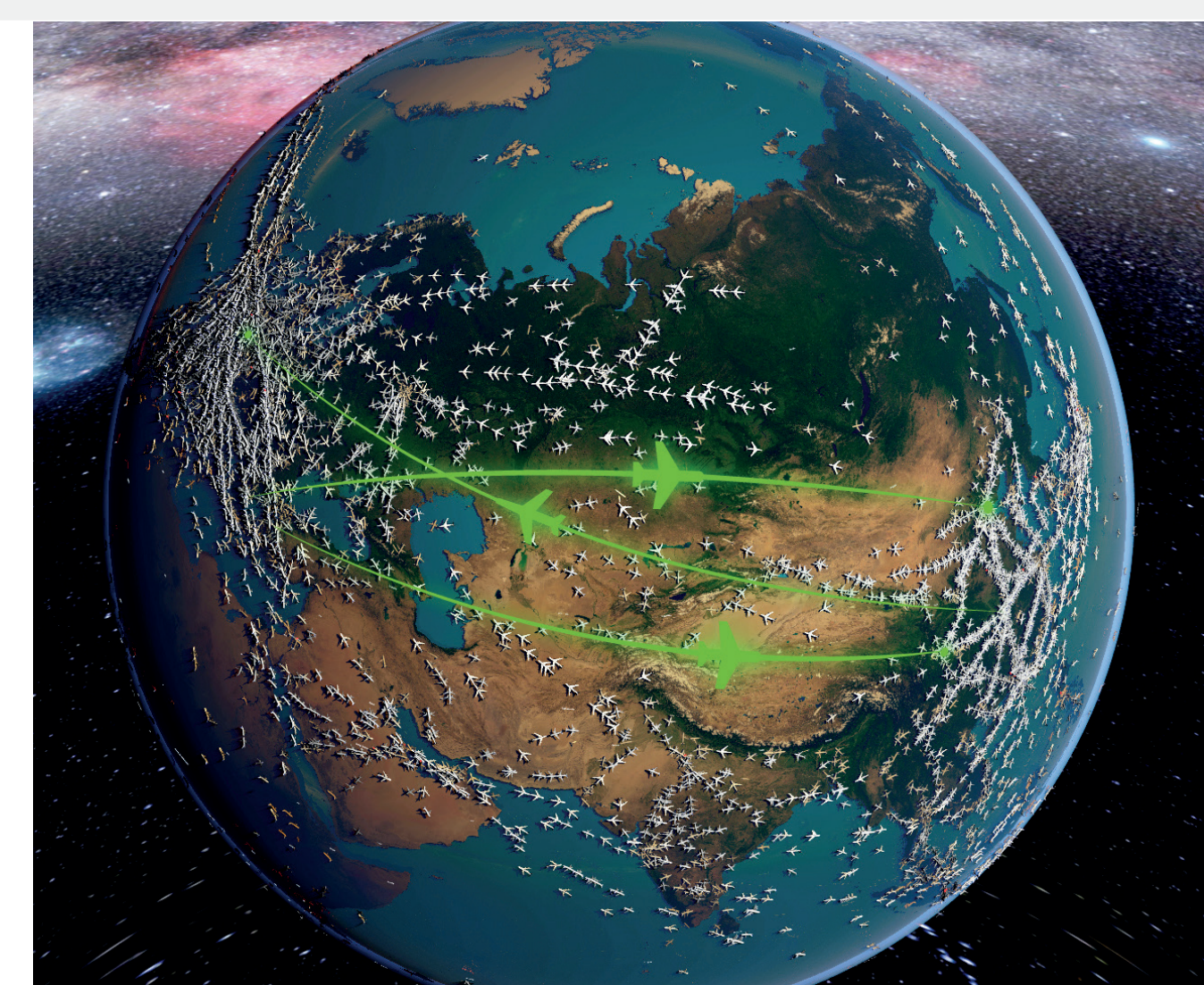
- Shortening of flight routes from long haul flight connections to Europe
- Less emissions
- Less impacts on the climate change

## International Cooperation



### In a nutshell

**Title of the Project:** Greener Air Traffic Operations — **Grant Agreement Number:** 875154 — **Project Type:** LC-MG-1-6-2019: Aviation operations impact on climate change — **Starting Date:** 1<sup>st</sup> Jan 2020 — **Duration:** 42 months — **Total Budget:** 6 992 163.75 € — **EC Grant:** 2 681 532.50 € — **Project Coordinator:** DLR



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