

PROJECT

## ClimOP

# CLIMATE ASSESSMENT OF INNOVATIVE MITIGATION STRATEGIES TOWARDS OPERATIONAL IMPROVEMENTS IN AVIATION

**Funding:** European (Horizon 2020)

**Duration:** Jan 2020 - Jun 2023

**Status:** Ongoing

**Total project cost:** €3,064,273

**EU contribution:** €3,064,273



**Call for proposal:** H2020-MG-2019-SingleStage-INEA

[CORDIS RCN : 226571](#)

### Objectives:

Air Transport has for a long time been linked to environmental issues like pollution, noise and climate change. Aviation emissions, such as carbon dioxide (CO<sub>2</sub>), water vapour (H<sub>2</sub>O), nitrogen oxides (NO<sub>x</sub>), soot and sulphate aerosols, alter the concentration of atmospheric Greenhouse gases and trigger the formation of contrails and cirrus clouds. The share of aviation amongst all anthropogenic CO<sub>2</sub> emissions is about 2% (ATAG).

However, studies estimate the climate impact from aviation for the year 2005 including non-CO<sub>2</sub> emissions to roughly 5% of the total anthropogenic radiative forcing (Lee et al., 2010). Considering the projected growth of air traffic for the next decades of 5% (RPK) per year, aviation's share of the total anthropogenic climate impact is expected to increase further. Consequently, intergovernmental organizations, aircraft manufacturers and operators and the research community are increasingly focusing on different technological, operational and regulatory climate impact mitigation options.

In this framework, ClimOP aims to identify, evaluate and support the implementation of mitigation strategies to initiate and foster operational improvements which reduce the climate impact of the aviation sector. Operational improvements correspond to any operational measure or action taken through time in order to improve the current provision of aviation operations. The overall objective of ClimOp is to define actions and advice for policymakers by proposing a set of most promising and harmonized mitigation strategies.

### Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

### Lead Organisation:

**Deep Blue Srl**

**Address:**

Via Ennio Quirino Visconti 8  
193 Roma  
Italy

**EU Contribution:** €423,625

### Partner Organisations:

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**Stichting Nationaal Lucht En-Ruimtevaartlaboratorium****Address:**

Anthony Fokkerweg 2  
1059CM AMSTERDAM  
Netherlands

**Organisation Website:**

<http://www.nlr.nl>

**EU Contribution:** €569,860

**Istanbul Okan Universitesi****Address:**

TEPEOREN MEVKII ISTANBUL PARK  
34959 ISTANBUL  
Turkey

**Organisation Website:**

<http://www.okan.edu.tr>

**EU Contribution:** €236,250

**Societa Per Azioni Esercizi Aeroportuali Sea Spa****Address:**

Presso Aeroporto Linate  
20090 Segrate - Milano  
Italy

**Organisation Website:**

<http://www.sea-aeroportimilano.it>

**EU Contribution:** €206,100

**Deutsches Zentrum Fr Luft Und Raumfahrt E.v****Address:**

Linder Hoehe  
51147 KOELN  
Germany

**Organisation Website:**

<http://www.dlr.de>

**EU Contribution:** €697,120

**Iata Espana SI Sociedad Unipersonal****Address:**

PASEO DE LA CASTELLANA 95, 5  
28046 MADRID  
Spain

**Organisation Website:**

<http://www.iata.org>

**EU Contribution:** €156,875

**Amigo Srl****Address:**

VIA FLAMINIA 48

00196 ROMA  
Italy

**EU Contribution:** €256,875

**Technische Universiteit Delft**

**Address:**

STEVINWEG 1  
2628 CN DELFT  
Netherlands

**Organisation Website:**

<http://www.tudelft.nl>

**EU Contribution:** €517,568

**Technologies:**

Aircraft operations and safety  
Optimization of air traffic operations for reduced environmental  
impacts

**Development phase:** Research/Invention

**STRIA Roadmaps:** Low-emission alternative energy for transport

**Transport mode:** Air transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Environmental/Emissions aspects

**Geo-spatial type:** Other