Aviation-driven Data Value Chain for Diversified Global and Local Operations

Fact Sheet

Project information

ICARUS
Grant agreement ID: 780792

Project website

Status
Ongoing project

Start date
1 January 2018

End date
31 December 2020

Funded under:
H2020-EU.2.1.1.

Overall budget:
€ 3,951,125

EU contribution
€ 2,999,600

Coordinated by:
GIOUMPITEK MELETI SCHEDIASMOS
YLOPOIIISI KAI POLISI ERGON PLIROFORIKIS
ETAIREIA PERIORISMENIS EFTHYNIS
Greece

Objective

The European aviation industry needs to leverage the surge of multi-source and multi-lingual data streams to gain augmented intelligence on its status quo and open up a wide spectrum of unprecedented services for the whole ecosystem (airlines, airports, passengers, service providers, manufacturers, local authorities, etc.).

ICARUS will build a novel data value chain in the aviation-related sectors towards data-driven innovation and collaboration across currently diversified and fragmented industry players, acting as multiplier of the “combined” data value that can be accrued, shared and traded, and rejuvenating the existing, increasingly non-linear models/processes in aviation. Using methods such as big data analytics, deep learning, semantic data enrichment, and blockchain powered data sharing, ICARUS will address critical barriers for the adoption of Big Data in the aviation industry (e.g. data fragmentation, data provenance, data licensing and ownership, data veracity), and will enable aviation-related big data scenarios for EU-based companies, organizations and scientists, through a multi-sided platform that will allow exploration, curation, integration and deep analysis of original, synthesized and derivative data characterized by different velocity, variety and volume in a trusted and fair manner.

ICARUS will bring together the Aerospace, Tourism, Health, Security, Transport, Retail, Weather, and Public sectors and accelerate their data-driven collaboration under the prism of a novel aviation-driven data value
chain. Representative use cases of the overall domain’s value chain include: (I) Sophisticated passenger handling mechanisms and personalised services on ground facilities, (II) Enhanced routes analysis of aircrafts for improved fuel consumption optimisation and pollution awareness, (III) More accurate and realistic prediction model of epidemics, (IV) Novel Passenger experiences pre-in- and post-flight.

Field of Science

/natural sciences/computer and information sciences/data science/big data
/natural sciences/earth and related environmental sciences/environmental sciences/pollution
/engineering and technology/mechanical engineering/vehicle engineering/aerospace engineering/aircraft
/natural sciences/computer and information sciences/artificial intelligence/machine learning/deep learning
/social sciences/social and economic geography/transport
/natural sciences/computer and information sciences/data science/data analysis
/social sciences/psychology/cognitive psychology/mental processes/learning
/social sciences/sociology/governance/public services

Programme(s)

H2020-EU.2.1.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Topic(s)

ICT-14-2016-2017 - Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation

Call for proposal

H2020-ICT-2017-1

See other projects for this call

Funding Scheme

IA - Innovation action

Coordinator
<table>
<thead>
<tr>
<th>Organisation</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Activity type</th>
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<tr>
<td>GIOUMPITEK MELETI SCHEDIASMOS YLOPOIISI KAI POLISI ERGON PLIROFORIKIS ETAIREIA PERIORISMENIS EFTHYNIS</td>
<td>€ 326 812,50</td>
<td>Mithridatou 36-38, 11632 Athina</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
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<td>ENGINEERING - INGEGNERIA INFORMATICA SPA</td>
<td>€ 245 000</td>
<td>Piazzale Dell'Agricoltura 24, 00144 Roma</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
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<td>PACE AEROSPACE ENGINEERING AND INFORMATION TECHNOLOGY GMBH</td>
<td>€ 248 500</td>
<td>Am Bahnhof Westend 13, 14059 Berlin</td>
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<td>SUITE5 DATA INTELLIGENCE SOLUTIONS LIMITED</td>
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<td>Library Square, Main Street, D24 Rathcoole</td>
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<td>UNIVERSITY OF CYPRUS</td>
<td>€ 278 750</td>
<td>Kallipoleos Street 75 1678 Nicosia</td>
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<td>CINECA CONSORZIO INTERUNIVERSITARIO</td>
<td>€ 244 375</td>
<td>Via Magnanelli 6/3 40033 Casalecchio Di Reno Bo</td>
<td>Research Organisations</td>
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<td>OAG AVIATION WORLDWIDE LIMITED</td>
<td>€ 249 375</td>
<td>1 Capability Green Lu1 3lu Luton Bedfordshire</td>
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<td>SINGULARLOGIC ANONYMI ETAIREIA PLIROFORIAKON SYSTIMATON KAI EFARMOGON PLIROFORIKIS</td>
<td>€ 364 787,50</td>
<td>Achaias 3 &amp; Troizinias 14564 Nea Kifisia</td>
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<td>ISTITUTO PER L'INTERSCAMBIO SCIENTIFICO</td>
<td>€ 256 250</td>
<td>Via Chisola 5 10126 Torino</td>
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<td>CELLOCK LTD</td>
<td>€ 245 000</td>
<td>39 Themistokli Dervi Office 502 1066 Nicosia</td>
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<td>ATHENS INTERNATIONAL AIRPORT S.A.</td>
<td>€ 268 625</td>
<td>Odos Spata Attikis 19019 Spata</td>
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SUITE5 DATA INTELLIGENCE SOLUTIONS LIMITED

Cyprus

EU Contribution
€ 272 125

Address
Alexandreias 2, Bridge Tower, Flat/Office 101 3013 Limassol

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation