

PROJECT

SAFEMODE

Strengthening synergies between Aviation and maritime in the area of human Factors towards achieving more Efficient and resilient MODE of transportation

Funding: European (Horizon 2020)

Duration: Jun 2019 - May 2022

Status: Ongoing

Total project cost: €10,683,032

EU contribution: €6,988,469



[CORDIS RCN : 223570](#)

Objectives:

Currently, both maritime and aviation sectors are lacking a systematic approach to collect and assess Human Factors information in normal and emergency conditions. There is also a lack of agreed methodology to assess human-related risks with the aim of influencing design and operation of aircraft and ships. Therefore, the research question being addressed in this project is “How to fully capture human elements and their interaction with the other system elements to enhance safety in maritime and aviation operations?”

It is important to address Human Factors aspects in relation to risk-based design of system and operations in a measurable manner by taking the variation in human behaviour over time and the non-flexibility of machines into consideration.

The main aim of SAFEMODE project is to develop a novel HUMAN Risk Informed Design (HURID) framework in order to identify, collect and assess Human Factors data to inform risk-based design of systems and operation. These aims have not been achieved previously at a desirable level due to the unavailability of systematically collected data and lack of cooperation between different transport modes.

The focus will be to reduce risks for safety critical situations, (e.g. mid-air collisions, grounding, evacuation, runway excursions etc.) through the enhancement of human performance. This will be achieved through investigation of past accidents, incidents, near-misses, reports, data from everyday operations, including previously unknown uncertainties such as increasing levels of automation and increased number of drones in transportation.

This information will be incorporated the HURID framework and tools and into SHIELD, the open data repository and the living database, that will be maintained and continuously updated.

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)

Other programmes: MG-2-1-2018 Human Factors in Transport Safety

Lead Organisation:

Deep Blue Srl

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EU Contribution: €947,674

Partner Organisations:

Archipelago Philippine Ferries Corporation

Address:

6TH FLOOR UNIOIL CENTER BUILDING COMMERCE AVENUE C ACACIA MADRIGAL BUSINESS PARK BRGY
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EU Contribution: €60,000

Embraer Portugal Estruturas Em Compositos Sa

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EU Contribution: €112,454

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<http://www.certh.gr>

EU Contribution: €207,500

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EU Contribution: €329,288

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EU Contribution: €532,500

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EU Contribution: €0

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Organisation Website:

<http://www.airbus.com>

EU Contribution: €130,750

National Technical University Of Athens

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Organisation Website:

<http://www.martrans.org>

EU Contribution: €236,250

Institut Teknologi Sepuluh Nopember

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EU Contribution: €60,000

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EU Contribution: €211,250

Wuhan University Of Technology

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EU Contribution: €0

World Maritime University

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Organisation Website:

<http://www.wmu.se>

EU Contribution: €255,938

Eurocontrol - European Organisation For The Safety Of Air Navigation

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1130 Bruxelles
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EU Contribution: €0

Waertsila Netherlands B.v.

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Organisation Website:

<http://www.wartsila.com>

EU Contribution: €196,641

Rail Safety And Standards Board Limited

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Organisation Website:

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EU Contribution: €112,500

**State Educational Institution Of Higher Professional Education Moscow Aviation Institute
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EU Contribution: €0

Kongsberg Maritime Cm As

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EU Contribution: €272,625

De Montfort University**Address:**

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EU Contribution: €201,814

Istanbul Okan Universitesi**Address:**

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Organisation Website:

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

EU Contribution: €160,813

Ryanair Designated Activity Company**Address:**

RYANAIR DUBLIN OFFICE AIRSIDE BUSINESS PARK
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Ireland

EU Contribution: €110,625

Moscow Institute Of Physics And Technology (State University)**Address:**

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EU Contribution: €0

Cetena S.p.a. - Centro Per Gli Studi Di Tecnica Navale**Address:**

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<http://www.cetena.it>

EU Contribution: €252,188

Federal State Unitary Enterprise The Central Aerohydrodynamic Institute Named After Prof. N.e. Zhukovsky**Address:**

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<http://www.tsagi.ru>

EU Contribution: €0

Demiral Ali**Address:**

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EU Contribution: €104,875

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<http://www.enac.fr>

EU Contribution: €298,750

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EU Contribution: €88,344

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EU Contribution: €79,063

Universita Degli Studi Di Roma La Sapienza**Address:**

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EU Contribution: €350,000

Tui Airways Limited**Address:**

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EU Contribution: €108,319

Universiteit Van Amsterdam

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EU Contribution: €200,188

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EU Contribution: €0

Chalmers Tekniska Hoegskola Ab

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EU Contribution: €405,625

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United Kingdom

Organisation Website:

<http://www.strath.ac.uk>

EU Contribution: €962,500

Technologies:

Infrastructure management
Human behaviour simulation

STRIA Roadmaps: Other specified

Transport mode: Multimodal transport

Transport sectors: Passenger transport

Transport policies: Other specified

Geo-spatial type: Other