

PROJECT

TeDiMo

Technology Diffusion Model

Funding: European (Horizon 2020)

Duration: Dec 2018 - Dec 2020

Status: Complete

Total project cost: €199,414

EU contribution: €199,414



Call for proposal: H2020-CS2-CFP07-2017-02

[CORDIS RCN : 220279](#)

Objectives:

The composition of a future aircraft fleet is, among others, dependent on new available technologies contributing to improved aircraft eco-efficiency. Thus, it is essential to know whether and to which extent new technologies find their way on the aircraft (either as a new configuration or as retrofit). The main objective of the project TeDiMo ("Technology Diffusion Model") therefore is to establish a sophisticated technology diffusion model in the context of the Technology Evaluator (TE) that facilitates the investigation of the propagation of new technologies developed in Clean Sky 2.

Methodology:

By applying the diffusion model to CS2-technology bricks a more comprehensive response of the contribution of the developed CS2-technologies towards the Flightpath 2050 goals is obtained. At this stage, technologies are assessed in specific concept vehicles which, however, do not cover the whole range of aircraft categories of the operated world fleet. Hence, for the categories not populated with CS2 concept vehicles additional representative aircraft have to be defined. Ecological, economic and social drivers that have a significant influence on the air transportation system must be then identified in order to derive changing requirements and the motivation for developing and installing new technologies into air vehicles. Applying the diffusion model by taking both current technological requirements and the motivation into consideration helps to understand the time-dependent propagation steps of new technologies (within and across the particular aircraft categories) and therefore to assess future aircraft fleet compositions.

The project outcome comprises the prediction of future aircraft fleet due to the implementation of new technologies including the demonstration of technological diffusion models in the aviation sector.

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: JTI-CS2-2017-CfP07-TE2-01-06 TE Technology diffusion model

Lead Organisation:

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EU Contribution: €199,414

Technologies:

Unclassified
Non-technology

Development phase: Research/Invention

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Deployment planning/Financing/Market roll-out

Geo-spatial type: Other