



Machine Learning Application Approval (MLEAP)

Contractor

Airbus Protect (former APSYS)

Consortium Members

LNE (LABORATOIRE NATIONAL DE METROLOGIE ET D'ESSAIS LNE),

NUMALIS SAS

Contract period

03/05/2022 - 02/05/2024

Budget

1 457 400€

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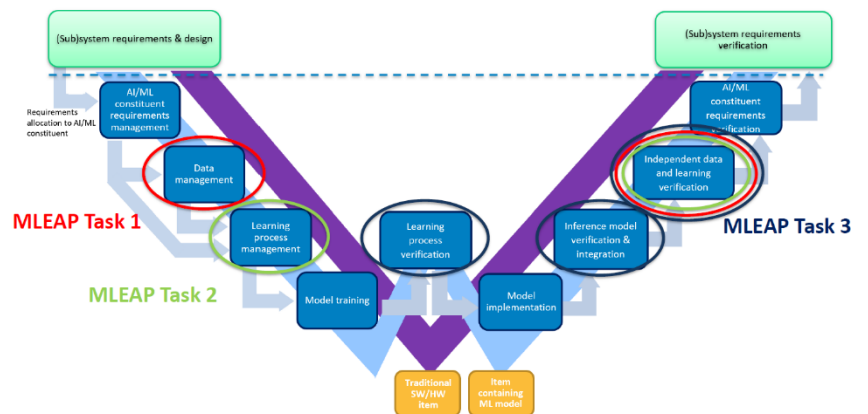


Main objectives

The project deals with the approval of machine learning (ML) technology for systems intended for use in safety-related applications in all domains covered by the EASA Basic Regulation (Regulation (EU) 2018/1139).

Data-driven learning techniques are a major opportunity for the aviation industry but come also with a significant number of challenges with respect to the trustworthiness of ML and deep learning (DL) solutions.

EASA published its [Artificial Intelligence Roadmap](#) in February 2020, followed by a first major deliverable, a Concept Paper '[First usable guidance for level 1 machine learning applications](#)' in April 2021. This concept paper lays down the basis of EASA future guidance for ML applications approval. MLEAP has been tailored to investigate the challenging objectives of the W-shaped process at the core of EASA AI Concept Paper.



Impacts & benefits

The intended short-term effect of this project will be to streamline the certification and approval processes by identifying concrete means of compliance with the learning assurance objectives of the EASA guidance for ML applications (levels 1, 2 and 3 as defined in the EASA AI Roadmap), with a specific focus on Level 1B and Level 2.

The achieved medium-term effect of the project will be to alleviate some remaining limitations on the acceptance of ML applications in safety-critical applications.

