PATHFINDER
Use machine learning to propose viable flight paths

INITIAL OBJECTIVE
The current pathfinder proposes the right routes to Airlines after fine-tuning with a slightly higher efficiency for the machine learning technologies on existing historical data.

INITIAL RESULTS
Both technologies showed considerable improvement of the current pathfinder efficiency with a slight advantage for the Random Forest and a high potential of combination of both of them.

USED TECHNIQUES
- Tuned random Forest
- Tuned Neural Network
- Tuned of flight paths on a portion of European sky

RESULTS AND BENEFITS
For EUROCONTROL
- Optimize the use of airspace while meeting the demand
- Skills improvement of operators on new technologies
- Automation enhancement within the NM Function

For Airline Operators
- Routes can be used directly, without further tuning by the Airline Operators
- Efficiency and Financial gains
- 60% improvement of the proposed routes against rejected ones from Airlines Operators

WHAT'S NEXT?
- Disseminate, Demonstrate and Show within NM lab
- Industrialisation
- Optimize other tools by capitalizing on the datasets tuned for pathfinder

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