

COSTS VERSUS SPEED, TIME & DISTANCE FLIGHT PLAN OPTIMISATION

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Flight plan reflects air operators preferences and ensures that it is as optimal as possible. During my presentation, I will focus on identifying the key elements that should be taken into account of optimal flight plan, which should be based on meteorological forecasts (in particular winds and areas that should be avoided i.e.. thunderstorms), restrictions on the availability of airspace, route fees for different charging zones, and the ability to control flight speed and vertical profile by imputing the Cost Index values. On the other hand, airspace environment is exposed to congestion and the dynamics of changes where conflict avoidance procedures are implemented on the daily basis. Therefore, the question is: whether finding the optimal flight trajectory is mathematically possible or whether certain approximations based on predefined flight trajectories should be used and how currently adopted KPI's reflect them.

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