

Development of an operational network optimisation system to decarbonise aviation (NABLA Mobility, Inc.)



City	Year of Establishment	Founder
Chiyoda, Tokyo	2019	Shinji Tanaka

Partner VC	Latest round of Fundraising	Valuation
IncubateFund	Non-Disclosure	Non-Disclosure

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○ Business Plan
We aim to reduce unnecessary fuel consumption and cut CO2 emissions by further improving the operational efficiency of aircraft. Additionally, by utilizing more detailed and real-time operational environment data, we seek to expand the range of efficiency improvements through operational optimization. Additionally, by visualizing and incorporating operational requirements beyond fuel consumption, we aim to expand the coverage of the system. Our ultimate goal is to develop an optimization system that accounts for the entire operational network.

○ Research Outline
In SBIR Phase 1, we developed a system that predicts turbulence, fuel consumption, and other factors based on data such as terrain and wind, in order to optimize the cruising altitude for individual aircraft. In this STS project, we will not only develop a system that determines the optimal route for individual aircraft, but also create a system that optimizes the operations of multiple aircraft as a network by forecasting traffic flow and adjusting atmospheric predictions. By the end of the project, we aim to have the system in practical use in operational environments.

Business Area/Field	Research Period	Research Grant Amount	International collaborative technology demonstration
Information & Communication	STS 2024～2026FY	JPY 397 million	United States(VA), France, UK, UAE

○International collaborative technology demonstration
- Relationship development with potential local partner
Negotiate with the Boeing company, which is a shareholder, and with domestic and foreign airlines that have expressed an interest, to give momentum to development.