Abstract Launching the World's First Commercial eVTOL Operation Challenges and Opportunities

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Skyports Infrastructure will help launch an aerial taxi service in Dubai in 2026. As vertiport operator we work closely with Joby Aviation as aircraft operator and Dubai's Road and Transport Authority. The unique challenge of this project is twofold: it is the first of its kind, which makes reliance on best practices difficult. And it requires the transfer of much research and technology into the real world with all it's no-technical constraints (political, societal, market, customer behavior).

In the presentation Skyports will give an introduction to the project scope and specifically focus on the development and design of its flagship vertiport, DXV. This vertiport is located outside the Dubai International Airport and its airfield consists of 2 FATOs serving simultaneous as stands. EIS is planned for 31 March 2026 and construction is under way, which allows for a unique real-time view into the construction progress.

We will elaborate on the various challenges that vertiport design in the real world bring. One is streamlining check-in. Our goal is to make this process as seamless and fast as possible, while reducing operational costs. This requires a mix of smart facility design, deployment of tech and re-thinking of requirements and processes. In a similar fashion, security screening needs to be fast and seamless, creating a pleasant passenger experience.

Beyond the individual vertiport, Skyports is actively working on topics relevant for the network of vertiports. With short flights (< 10 minutes) and a single vertiport operator across all four vertiports in Dubai, new opportunities and challenges arise. We need to think through flight routes, demand, accessibility and demand. All of this work is conducted to launch a vertiport network in Dubai in 2026, while allowing for scale-up of volume into profitable operations within a few years.

BiographySpeaker Given Name



Lukas Preis oversees business intelligence and operations research at Skyports. After finishing his PhD on vertiport design and operations at the Technical University of Munich in 2022, he now applies his methodological expertise to the emerging AAM industry. He has a passion for simulation and helping both business and academia make data-driven decisions.