

# Refining the Elysian E9X Cabin Concept

Creating the SkyConsole



**Assignment** | The primary challenge for the E9X cabin design is achieving the right balance between passenger comfort, efficiency, and sustainability while remaining lightweight and technically feasible within aviation design and regulation limits.

**Analysis** | By analyzing the previous cabin design project at Elysian (Van Duivenboden, 2025), it was found that removing overhead bins is valuable. Research on passenger behavior, cabin crew interviews, trend analysis, and a literature review identified areas for improvement, such as more personal space, ergonomic luggage storage, a lightweight system, and visual peace.

**Design Goal** | "Create a compact, intuitive, and inclusive aircraft interior that enhances passenger comfort and crew efficiency on short-haul flights by rethinking how personal space, luggage, and interaction coexist within limited cabin dimensions."

**Product Development** | A concept was chosen based on Desirability, Feasibility, and Viability (SkyConsole), developed across nine areas: Existing solutions, certification, dimensions, stakeholders, design language, weight, functionality, construction, and materials.

**Final Design** | A multifunctional storage and armrest console (SkyConsole) in three variants (classes) was designed, considering the future context of passenger comfort, crew efficiency, and technical challenges like weight, dimensions, and certification.

**Evaluation** | User tests and cabin crew interviews confirmed the SkyConsole improves passenger experience, enhances cabin crew workflow, and offers potential for weight savings and sustainability.



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Refining the  
Elysian E9X Cabin Concept  
Integrated Product Design

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