INDUSTRIAL STRATEGY

UK Research and Innovation

SATE
SUSTAINABLE AVIATION TEST ENVIRONMENT

Sustainable Aviation Test Environment

SRITC October 2023 Virtual Cafe

Lukas Princ

Sustainable Aviation – Technology Strands

The 5 strands of sustainable aviation technology	Low or zero emission 9-19 seat passenger aircraft	Hybrid Air Vehicles	Amphibious Aircraft	Advanced Air Mobility (an electric vertical or short take off & landing)	Heavy Lift Drones, conventional and vertical take off & landing
Payload / Passenger capacity	9-19	10 – 80 Ton / 100 – 130 pax	Initially 5 -12 End of decade up to 100	4	100 – 300kg
Range	250NM	2,000 NM	180 – 300 NM	100 - 200 NM	350 - 500 NM
In service by	2027+	2026+	2026+	2027+	2025+
Core use case	Inter-island & sub-regional movement of passengers	Large pax & cargo movement	Increased connectivity, (cargo and pax), port/water operation	New class of aircraft ”air taxi, short regional and urban flights”	Logistic & mail deliveries








Sustainable Aviation – Outputs : Pathway to operational service

Airlander Concept of Operations – H&I Scotland	Vertical and short take off and landing port study	Project HEART – Next Generation Regional Airport Terminal Design	Advanced Air Mobility in the Highlands & Islands	Operating Requirements and Route Analysis	Regional Transport Strategy
HAV	Small World Aviation	Led by Bluebear systems	Bristow Helicopters	Cormorant	HITRANS
Focus on operability for movement of passengers and cargo with the use of hybrid airships.	Focus on new infrastructure design to enhance connectivity	Next generation regional airport terminal	Understanding connectivity options using emerging aviation technology	Potential sites, operating considerations (including emissions), & costs	Integration of new sustainable aviation technology to the regional transport strategy.