ACP 2022-201 Final Submission

June 2023

Appendix 1

Extract of Flight Objectives Mapping

Exercise 1
Trial 0
Skyports
Golden Jubilee

Key focus areas
1) ATM/UTM exchange
2) NHS tracking
3) Non-nominal police alert

"Child" Validation Requirement	Partner(s) involved	Airside	Non-Airside	ID	"Parent" Validation Objective(s)
					FF3 Roadmap Mapping
The UAS Operator (Skyports) shall ascertain landing site availability in the planning phase.	Skyports	Y		S09	Demonstrate vertiport deployment with local transport and building infrastructure integration e.g., connected transport
The USP (ANRA) shall check the planned UAS route in CAS for strategic conflicts.	ANRA	Y		S04	Demonstrate planning of UTM operations with strategic deconfliction and demand balancing to ensure efficiency
The UAS Operator (Skyports) shall receive supplementary data from USP (ANRA).	ANRA, Skyports	Y		S21	Demonstrate strategic and tactical route flight planning in urban areas to manage safety and environmental concerns

The UAS (Skyports) flight plan shall be activated through an exchange with the USP (ANRA) and ATM (NATS).	Skyports, ANRA, NATS	Y		S07	Demonstrate drones flying airside whilst maintaining existing traditional aircraft operations
				S15	Demonstrate coordination with local airports on flight planning
				S20	Demonstrate exchange of information between flight operations, airport and traffic management services to manage predictability of operations
				S22	Demonstrate flight planning coordination between other airspace users
				S26	Demonstrate whole journey clearance and approval in advance for operations
The UAS (Skyports) shall be tracked (ANRA) using the ADS-B feed (Planefinder) as input.	ANRA, Skyports, Planefinder	Y		S24	Demonstrate high-integrity, low-latency data exchange for digital infrastructure
The customer (NHS) shall track the UAS (Skyports) via the DMS (ANRA).	NHS, Skyports, ANRA	Y		S20	Demonstrate exchange of information between flight operations, airport and traffic management services to manage predictability of operations

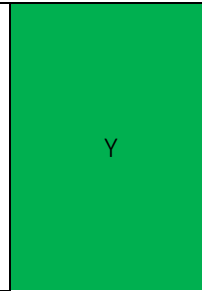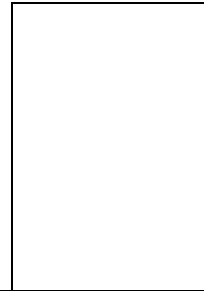| Requirement	Stakeholders			ID	Demonstration
A non-nominal alert shall be sent from ATM (NATS) to the USP (ANRA) and subsequently to the UAS Operator (Skyports) in response to a police/HEMS operation.	ANRA, NATS, Skyports	Y		S17	Demonstrate command and control links with aircraft
The UAS Operator (Skyports) shall check the landing site is safe to land.	Skyports	Y		S20	Demonstrate exchange of information between flight operations, airport and traffic management services to manage predictability of operations
Confirmation of UAS (Skyports) safe landing shall be received by the USP (ANRA) and customer (NHS).	Skyports, NHS	Y		S20	Demonstrate exchange of information between flight operations, airport and traffic management services to manage predictability of operations
The drone delivery service shall ensure staff loading and interacting with the drone are trained.	Skyports		Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations
The drone delivery system shall prevent unauthorised access to the drone and medical goods it is carrying.	Skyports, NHS, Intelsius		Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations
The drone delivery service shall comply with all relevant regulations related to aviation.	Skyports		Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations

The drone delivery service shall comply with all relevant regulations related to data protection. This includes but not limited to healthboard information governance policy.			Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations
	Skyports, ANRA				
The drone delivery service shall comply with all relevant regulations related to healthcare.			Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations
	Skyports				
The drone delivery service shall be approved for dangerous goods carriage of the appropriate category.			Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations
	Skyports				
The drone delivery service shall have an auditable end-to-end chain of custody system in place.			Y	N02	Demonstrate a drone delivery services that complies with NHS Scotland policies and regulations
	Skyports, NHS, Intelsius				

The drone delivery service shall provide information on its weather capabilities	Skyports		Y	N03	Demonstrate a drone delivery service that meets NHS Scotland's performance requirements
The drone delivery service shall allow approved staff to track the drone delivery progress.	Skyports		Y	N01	Demonstrate a drone delivery service that meets NHS Scotland's interface and design requirements
The drone delivery service shall include training NHS staff on flight operations.	Skyports		Y	N01	Demonstrate a drone delivery service that meets NHS Scotland's interface and design requirements
The drone delivery service should ensure the medical items are delivered to at least the current drop-off location within the health facility.	Skyports		Y	N04	Demonstrate a drone delivery service that meets NHS Scotland's usability requirements
When laboratory samples are being transported, the drone delivery service shall deliver the samples to the lab reception.	Skyports		Y	N04	Demonstrate a drone delivery service that meets NHS Scotland's usability requirements
The drone delivery service should accept the medical goods packaging that is currently used.	Skyports, NHS, Intelsius		Y	N04	Demonstrate a drone delivery service that meets NHS Scotland's usability requirements
The Drone Office:* flight demo participants will respond to a questionnaire on their live experience - sound and visual experience	TDO		Y	P04	Demo participant feedback

* real medical professionals or NHS logistics staff or Scottish Ambulance staff load and offload the drones, and will respond to a questionnaire on their live experience (for example on medical package quality assurance, the ULD packaging by Intelsius, chain of custody and GDP, sound, Visual impact, ease of loading offloading...) (can be during a VLOS test flights)	TDO		Y	P04	Demo participant feedback