

Memo

Proposal to launch a long range unmanned aerial vehicle (UAV / Drone) competition

Initial Purpose: To enhance air connectivity for Air Cargo / E-commerce / Humanitarian Aid / Medical Support in remote terrain.

Objective of competition (test phase):

- 1) Provide new UAS system providers real-time test conditions for future mode of transport
- 2) Collect real-time test data for evaluation (safety, performance, cost, efficiency, endurance)
- 3) Determine best-in-class UAS systems: local / regional / global
- 4) Transparent test environment for: Investors, regulators, aviation / logistic community
- 5) Opportunity for countries like Malaysia (or ASEAN) to be part of global innovation movement

Structure:

- 1) Design a multi-stage test / competition over a time period of 9 to 12 months
- 2) Develop test criteria e.g. distance of 1000km with a payload of 400 kg (or similar)
- 3) Establish categories e.g. (a) large manufacturers (b) medium industry players (c) new start-ups
- 4) Set-up: host (government), organizer (university), sponsors (industry), champion, jury panel
- 5) Determine test environment e.g. safe air corridor with no civil airspace interference and option to abort flights.
- 6) Each entrant to pass each stage to advance with final stage being a 6-month flight testing
- 7) Winning teams to get a prize.

Proposed 4-stage approach:

Stage 1) Economics: Presentation of concept with economics and business case plus real-time experiences. (2 hours per entrant – details tbd)

Stage 2) Technical: Presentation of UAS / Drone for technical check, airworthiness approval and certification to be fit for flight. (1 day per entrant – details tbd)

Stage 3) Interoperability: Presentation of ground control, control of unmanned aircraft, integration with civil airspace and all safety measure. (1 day per entrant – details tbd)

Stage 4) Final test phase: 6-month (3-months?) regular flight testing (eg daily) between 2 points over longer distance not interfering with civil airspace. Tests are being constantly monitored for data collection, review and assessment.

If necessary, additional stages could be added after review and discussion of such innovation competition (“flyathon”) to provide a viable proposal and engage all necessary stakeholders. The final proposal should be discussed in a workshop with all key stakeholders.

Such initiative could be launched as soon as there is buy-in since the subject of “cargo” drones is advancing world-wide. Malaysia or other ASEAN countries like Indonesia or the Philippines should be very suitable for the future use of cargo drones (UAS) as well as flight testing being an archipelago of many islands having airspace (or air corridors) not interfering with civil airspace for safe testing purposes.