



NOTIFICATION OF RPAS REQUIREMENT

Call for Candidates

- Preamble:** A well-reputed & recognised international organisation established in the European Union has requested UVS International to make its urgent requirement for a remotely piloted aircraft system and various accessories known to the European RPAS community.
- Requirement:**
- 1) Remotely Piloted Aircraft System - RPAS (aircraft & associated remote pilot station)
 - 2) Interchangeable payloads (1 x DSLR & 1 x 4K video camera & 1 x multispectral camera & 1 x infrared camera) on gyro-stabilised camera mount
 - 3) Documentation
 - 4) Recommended spare parts package (120 flight hours)
 - 5) All 4 aforementioned should be proposed as one package
- Product origin:** European Union
- Product status:** In production
- Maturity:** The type of system to be proposed must have logged a minimum of 250 operational flight hours with one single customer.
- Quantity:** 1 RPAS + 1 gyro-stabilised camera mount + 4 interchangeable payloads + documentation + recommended spare parts package
- Application:** Photogrammetry (mapping & 3D modelling) & soil monitoring
- Availability:** Immediate
- Delivery:** September 2015

Aircraft Requirements

- Aircraft type: Multicopter
- Type of engines : Electric, brushless
- Number of engines : 8 arms - each with 1 engine & 1 rotor set; or
6 arms - each with 1 engine & 1 rotor set; or
6 arms - each with 2 engines, each with 1 rotor set; or
4 arms - each with 2 engines, each with 1 rotor set.
- Shrouded rotors
- Interchangeable & rechargeable batteries
- Payload capacity : 4 kg (or more) (on top of batteries)
- Batteries : To be supplied
- Battery charger : To be supplied
- Lockable flight transport case : To be supplied

Control Requirements

- Command & control frequency: Available options to be supplied
- Manual remote control
- Programmable waypoint flight (minimum 50 waypoints)
- GPS waypoint planning with the ability to save flight data
- Fully integrated geo-fencing (horizontal & vertical) - Desirable
- Automatic return home function
- Failsafe system

Payload Requirements

- Cameras to be proposed: - 1 x DSLR (12 MegaPixels) (available optics to be indicated);
- 1 x 4K video camera;
- 1 x multispectral camera;
- 1 x infrared
- Imagery: Time-coded & geo-referenced
- Real-time video downlink
- Electronic image stabilisation
- Imagery downlink frequency: Available options to be supplied
- Payload control frequency: Available options to be supplied
- Gyro-stabilised camera mount (gimbal) stabilization: Available options to be supplied
- Interchangeability of all 4 cameras on gyro-stabilized camera mount (gimbal)
- Camera flight transport cases: Available options to be supplied

Performance Requirements

- Flight time: minimum 30 minutes
- Flight altitude: 2500 m Above Sea Level
1000 m Above Ground Level, with reliable minimum altitude
- Maximum speed: 50 km/h
- Maximum wind: 40 km/h
- Maximum climb rate: 8 m/s
- Auto landing: Desirable
- Operating temperature: -10 °C to +50 °C
- Environmental: Fine particle dust & sand resistant
90% humidity resistant

Required Documentation

- Flight operation/user manual in English
- Maintenance manual in English
- Spare-parts listing (itemised) in English

To be Quoted as an Option

Complete recommended spare-parts package for 1 year (120 hours flight hours), including recommended proprietary maintenance tool(s) – if required.

Packed in lockable flight transport case.

Spare parts package to be itemised & each spare part to be individually priced.

Warranty

1 year warranty = 120 flight hours functionality covering the entire system (as defined under requirements - points 1 & 2)

PRE-QUALIFICATION

Manufacturers interested to be considered as potential suppliers are requested to supply the following as PDF files:

- a) Cover letter on supplier's letterhead supplying the name & contact details of the person in charge of this matter.
- b) Technical specifications & performance specifications of:
 - b.1 RPAS
 - Available command & control link options
 - Available imagery downlink options
 - b.2 Payload mount & payloads
 - Gyro-stabilised camera mount (gimbal)
 - DSLR
 - Video camera
 - Multispectral camera
 - Infrared camera
 - b.3 Remote Pilot Station
- c) Commercial brochure or data sheet of each of the aforementioned
- d) Confirmation of the maturity of the proposed system
- e) Confirmation of RPAS auto land capability
- f) Confirmation that all mentioned under a), as well as the following, can be supplied ex-warehouse prior to 30 September 2015:
 - Batteries
 - Battery charger
 - Lockable flight transport case for RPAS
 - Lockable flight transport case for each camera (or one for all cameras)
 - Lockable flight transport case for Remote Pilot Station
 - Lockable flight transport case for recommended spare parts
 - The required documentation
 - Flight operation/user manual in English
 - Maintenance manual in English
 - Spare parts listing (itemised)
 - Recommended spare parts package

Submission

The documents & information mentioned under a), b), c), d), e), f) above are to be supplied in one single zipped folder by email to: **UVS International - Att.: Peter van Blyenburgh** - at **pvb@uvs-international.org** – Who will forward

The zipped folder name should have the following structure: **company name_country of origin_submission date**

The submission date in the folder name should be constructed as follows: **yyyy/mm/dd**

Submission deadline: 11 September 2015