



## Terms & Definitions

One of the outputs of the Interim Working Group on Light UAS (IWGLUAS), instigated and lead by UVS International, was the following listing of UAS-related terms and definitions.

These terms and definitions, which took into account the terms & definitions put forward by the EUROCAE WG73 Sub-Group on Terms & Definitions, which was also lead by UVS International, have been submitted to EUROCAE WG73 and ICAO for their consideration.

### **Air traffic control communications equipment**

All equipment permitting dialog between the UAS crew and air traffic control.

### **Automatic**

The execution of a predefined process that requires UAS-c initiation.

### **Communication link**

A digital or analogue data link to transfer voice or data between the UAS crew, air traffic control, airspace users and other data users.

### **Control link**

A data link for up-linking safety-related command instructions and down-linking UA status data from the UA to the control station(s).

### **Control station (CS)**

A facility or device(s) from which a UA is controlled for all phases of flight. There may be more than one control station as part of a UAS.

### **Data link**

A term referring to all interconnections to, from and within the UAS. It includes control, communication, and payload links.

### **Data terminal**

Independent or integrated transmitter/receiver facility permitting to up-link aircraft and payload control data to the UA, receive and display telemetry and payload data originating from the UA, and communicate with external facilities, including ATC.

### **Down-link**

Direct or indirect communication link from the unmanned aircraft.

### **Flight termination system (FTS)**

Any means and/or procedure triggered manually or automatically to initiate a pre-programmed action or a set of actions designed to terminate the flight in a safe manner.

### **Flight time**

The total time from the moment of an aircraft first moves under its own power for the purpose of taking off until the moment it comes to rest at the end of the flight.

Note: Flight time normally includes taxiing, which involves the ground operation to and from the runway, as long as taxiing is carried out with the intention of flying the aircraft.

### **Launcher**

A mechanical facility used to launch an UA that is not capable of conventional take off.

### **Light unmanned aircraft (LUA)**

An unmanned aircraft with a mass of less than 150 kg.

### **Light unmanned aircraft system (LUAS)**

An unmanned aircraft system comprising one or several LUA.

### **Maintenance equipment**

All equipment required to maintain the UAS in operational status.

### **Payload**

All elements of a UA that are not necessary for flight but are carried for the purpose of fulfilling specific mission objectives.

### **Payload link**

A data link for up-linking command instructions to the UA payload and down-linking payload data, which is not critical to the safe operation of the UAS.

### **Pilot in command (PIC)**

The pilot responsible for the operation and safety of the aircraft during flight time.

### **Support equipment**

All equipment required to assure the correct functioning of the UAS.

### **Unmanned**

No person on board capable of exercising any control over the aircraft.

### **Unmanned aircraft (UA)**

An aircraft which is designed to operate with no person on board capable of exercising any control over the aircraft.

### **Unmanned aircraft launch & recovery element**

A facility or device(s) from which a UA is launched or by which a UA is recovered. There may be more than one launch and recovery element as part of a UAS.

### **Unmanned aircraft system (UAS)**

The combination of unmanned aircraft (UA), system elements necessary to enable the taxiing, take-off/launch, flight and recovery/landing of UA, and the elements required to accomplish its mission objectives.

The system elements include:

- control stations;
- software;

- health monitoring;
- communication, control & data links;
- data terminals;
- payload(s);
- launch & recovery elements;
- flight termination systems;
- support & maintenance equipment;
- power generation, distribution & supply;
- air traffic control communications equipment;
- handling, storage & transport equipment;
- all required documentation related to aforementioned.

**Unmanned aircraft system crew (UAS-c)**

All persons assigned to fulfil specific functions relative to the correct & safe operation of the UAS.

**Unmanned aircraft system commander (UAS-cdr)**

The person who has overall authority & responsibility for the safe operation of a UAS during a specific mission. The UAS commander may also fulfil the UAS pilot function.

**Unmanned aircraft system crew member (UAS-cm)**

A person assigned to perform specific duties prior to UA flight, during the operation of the UAS, and after recovery or landing of the UA.

**Unmanned aircraft system operator (UAS-o)**

The legal entity approved for the operation of a UAS.

**Unmanned aircraft system pilot (UAS-p)**

The person in direct control of the UA whilst the engine is running and responsible to the UAS-cdr. The UAS-p may have direct control of more than one UA.

**Up-link**

Direct or indirect communication link to the unmanned aircraft.

**Visual control**

Method of control and collision avoidance that refers to the pilot or observer having an uninterrupted view with human eyesight of the unmanned aircraft and the airspace around it in order to avoid collision. Corrective lenses (spectacles or contact lenses) may be used by the pilot or visual observer.

**ADDITIONAL TERMS & DEFINITIONS**

**Not Applicable to Light UAS**

**Optionally piloted aircraft (OPA)**

Aircraft that may be operated by an onboard pilot or without an onboard pilot.

**Safety pilot**

A person on board a SUA who can possibly fulfil the pilot, function if required.

**Surrogate UA (SUA)**

An OPA flown as a UA, but with a safety pilot on board.