

Annex to the Regulation of 20 December 2018 of the  
Minister of Infrastructure (Item 94)

UNMANNED AERIAL VEHICLES WITH TAKE-OFF WEIGHT NOT GREATER THAN 25 KG, USED  
IN BEYOND-VISUAL-LINE-OF-SIGHT (BVLOS) OPERATIONS, EXCLUDING  
UNMANNED AERIAL VEHICLES WITH TAKE-OFF WEIGHT NOT GREATER THAN 2 KG  
USED IN FIRST-PERSON-VIEW (FPV) OPERATIONS

Chapter 1

**Applicability**

1.1. The provisions of this annex shall apply to unmanned aerial vehicles with take-off weight not greater than 25 kg, used in beyond-visual-line-of-sight (BVLOS) operations on flights made outside segregated airspace from airspace generally open to aviation referred to in Article 126(4) of the Aviation Law Act. The provisions do not apply to unmanned aerial vehicles with take-off weight below 2 kg used in first-person-view (FPV) operations.

1.2. Upon a reasoned application, in particular where operating, specialist, automatic, training, experimental or test flights are made, the President of the Polish Civil Aviation Authority may exempt the entity concerned from the obligation to meet certain requirements set forth in the annex, maintaining the safety requirements.

Chapter 2

**Definitions**

2. For the purpose of this annex:

- 1) "AMC Poland" shall mean the Airspace Management Cell of the Polish Air Navigation Services Agency;
- 2) "ATS" shall mean Air Traffic Services;
- 3) "safety distance" shall mean the distance between an unmanned aerial vehicle and other aircraft, obstacles, persons or animals, enabling avoidance of a collision, resulting from the analysis of the prevailing meteorological conditions, surroundings and obstacles within the flight area as well as the type of the unmanned aerial vehicle operated and qualifications of the operator;
- 4) "warning vest" shall mean brightly coloured yellow, red, orange or green warning clothing worn on outerwear;
- 5) "automatic flight" shall mean an operation where an unmanned aerial vehicle automatically performs take off and landing in a designated place, and a flight on a programmed route where the operator only remotely supervises the operation while maintaining the ability to immediately take over control of the unmanned aerial vehicle or to take other measures in the event of an emergency;
- 6) "beyond-visual-line-of-sight (BVLOS) operation" shall mean an operation where the operator of an unmanned aerial vehicle does not maintain direct visual contact with the unmanned aerial vehicle;
- 7) "operator" shall mean a person remotely controlling an unmanned aerial vehicle or supervising and managing the flight of an unmanned aerial vehicle or of a group of unmanned aerial vehicles in an automatic flight, and in the case of military unmanned aerial vehicle operations - also trained personnel holding privileges to operate a given type of an unmanned aerial vehicle;
- 8) "PKOB" shall mean Polska Klasyfikacja Obiektów Budowlanych (Polish Classification of Construction Works) introduced under the Regulation of the Council of Ministers of 30 December 1999 on the Polish Classification of Construction Works (Journal of Laws, item 1316, and Journal of Laws 2002, item 170);
- 9) "ADIZ" shall mean an air defence identification zone;
- 10) "ATZ" shall mean an aerodrome traffic zone;
- 11) "CTR zone" shall mean an aerodrome control zone;
- 12) "zone D" shall mean a danger area;
- 13) "MATZ" shall mean a military aerodrome traffic zone;
- 14) "MCTR" shall mean a military aerodrome control area;
- 15) "zone P" shall mean a prohibited area;
- 16) "zone R" shall mean a restricted area;
- 17) "communication and information system" shall mean a set of cooperating computer devices and software defined by an air traffic service provider which provides for processing and storage as well as transmission and reception of data

through telecommunication networks with a network-specific terminal device within the meaning of Article 2(43) of the Telecommunications Law of 16 July 2004 (Journal of Laws 2018, items 1954, 2245 and 2354);

- 18) "special care" shall mean care that involves increasing the attention and adapting the behaviour of the operator, or securing and adapting the take-off and landing site of an unmanned aerial vehicle or the area in which the flight is performed, to the changing conditions and situations during the flight to the extent that enables safe performance of the flight;
- 19) "means of electronic communication" shall mean technical solutions, including communication and information devices and related software tools, that provide for remote individual communication by means of data transmission between information and communication systems, in particular electronic mail;
- 20) "multi-rotor craft" shall mean a rotorcraft maintained in flight mainly by reaction of air on more than two main rotors.

### Chapter 3

#### **Responsibility**

3.1. The operator shall:

- 1) maintain particular care, avoid any action or omission that could:
  - a) compromise safety, including air safety,
  - b) hinder air traffic,
  - c) disturb the peace or public order,
  - d) expose any person to harm,
  - e) hinder or prevent safe performance of the flight and observation or monitoring of the surroundings of the unmanned aerial vehicle by means of its on-board devices or devices comprising its ground equipment, in particular a camera, transponder or other devices that enable enhancing the flight safety and maintaining safety distance from other aircraft or obstacles;
- 2) control the unmanned aerial vehicle in a manner that enables avoiding a collision with another aircraft or an obstacle;
- 3) supervise and manage the flight of the unmanned aerial vehicle or a group of unmanned aerial vehicles in automatic flights by means of a communication and information system that controls these vehicles;
- 4) ensure that the unmanned aerial vehicle that he or she controls or supervises and manages in an automatic flight gives priority to manned aircraft;
- 5) take responsibility for the decision to perform the flight and for the correctness of the flight;
- 6) operate the unmanned aerial vehicle and controlling devices in accordance with recommendations and limitations defined by the manufacturer of a given type of the unmanned aerial vehicle and in accordance with any preventive recommendations of the President of the Polish Civil Aviation Authority, if published, regarding unmanned aerial vehicles issued pursuant to Article 21(2)(15)(c) of the Aviation Law Act and based on the latest expertise relating to operation of unmanned aerial vehicles and aviation occurrences;
- 7) inspect the condition of the unmanned aerial vehicle prior to and after the flight;
- 8) perform the flight with an airworthy unmanned aerial vehicle.

3.2. In the event that an operator who is to perform an automatic flight is not at the take-off site, the technical condition of the unmanned aerial vehicle used shall be ensured by the entity referred to in Paragraph 7.1.

### Chapter 4

#### **General flight conditions**

4.1. An unmanned aerial vehicle may perform BVLOS operations in the case of:

- 1) operating flights made during or for the purposes of:
  - a) operations conducted by the state aviation,
  - b) operations conducted by the Customs and Tax Service,
  - c) operations relating to the prevention or combating of natural disasters or catastrophes,
  - d) operations relating to the health care system,
  - e) search or rescue operations,

- f) operations relating to the protection of the internal security of the State,
- g) operations relating to identification of safety and environmental threats;
- 2) specialist operations conducted during or for the purposes of:
  - a) surveillance, monitoring, control or protection of:
    - civil engineering structures within the meaning of the PKOB,
    - forest or water areas,
    - persons or property,
  - b) operations:
    - relating to land surveys,
    - relating to agriculture or forestry;
  - c) research, test, trial or demonstration flights;
- 3) automatic operations conducted during or for the purposes of:
  - a) surveillance, monitoring, control or protection of:
    - land and water engineering structures within the meaning of the PKOB,
    - forest or water areas,
  - b) agricultural air operations,
  - c) medical supplies,
  - d) research, test, trial or demonstration flights;
- 4) training operations conducted as part of training activities referred to in Article 95a of the Aviation Law Act.

4.2. Flights referred to in Paragraph 4.1 may be performed by entities that obtained a permit to perform these types of flights, referred to in Paragraph 8, from the President of the Polish Civil Aviation Authority.

4.3. Flights referred to in Paragraph 4.1 may be performed after the air traffic service provider has published information on scheduled and performed flights of unmanned aerial vehicles.

4.4. The air traffic service provider shall publish information on:

- 1) scheduled flights of unmanned aerial vehicles:
  - a) at least 2 days prior to the flight date - for operating, specialist, automatic and training flights,
  - b) on the flight date - for operating flights where it was not possible to plan the flight earlier;
- 2) performed flights, with specification of:
  - a) the route or area where a flight is to be performed,
  - b) the flight altitude above mean sea level (AMSL) along the entire route or respective sections thereof,
  - c) the flight time planned by the operator,
  - d) identification sign of the unmanned aerial vehicle.

4.5. Activities that consist in:

- 1) notifying the air traffic service provider of the intention to perform a flight and of the completion of the flight,
- 2) notifying the operator by the air traffic service provider of the conditions under which the flight is to be performed in zones referred to in Paragraph 5.1,
- 3) publishing, by the air traffic service provider, of information on planned or performed flights of unmanned aerial vehicles and other information on circumstances that may affect the flight safety of those vehicles

- shall be done through the communication and information system or means of electronic communication defined by the air traffic service provider.

4.6. The provisions of Paragraphs 4.3 and 4.4 shall not apply to unmanned aerial vehicles performing flights for the purposes of special services referred to in Article 11 of the Act of 24 May 2002 on the Internal Security Agency and the Intelligence Agency (Journal of Laws 2018, items 2387, 2245 and 2399 and Journal of Laws 2019, item 53).

**Detailed flight conditions**

5.1. BVLOS operations shall be conducted subject to the following conditions:

- 1) upon a prior notification to the air traffic service provider of the intention to perform the flight at least 7 days prior to the flight date;
- 2) in compliance with comments provided by the air traffic service provider regarding the route and area in which the flight is to be performed;
- 3) operating, specialist or training flights:
  - a) at heights of up to 120 m above ground level,
  - b) with speeds of up to 150 km/h;
- 4) automatic flights:
  - a) at heights of up to 50 m above ground level or up to 50 m above the highest obstacle within a 100 m radius from the flight site,
  - b) at horizontal distances below 100 m from built-up areas of towns, cities or residential settlements, subject to a permission from and under conditions established by the town or city authorities,
  - c) with speeds of up to 150 km/h;
- 5) training flights - at horizontal distances of at least 150 m from residential areas and other centres of population, and at horizontal distances of up to 500 m from the controlling operator;
- 6) ensured full flight control;
- 7) maintaining safety distance from other aircraft, obstacles, persons or animals, and taking into account the weather conditions and information on air traffic restrictions;
- 8) in CTR zone - subject to conditions defined by the air traffic service provider;
- 9) in ATZ, zone D, MATZ, MCTR or zone P - subject to an approval from the entity managing a given zone and under conditions defined by that entity;
- 10) within zone R covering the airspace directly above national park areas - subject to an approval from the entity managing a given national park and under conditions defined by that entity;
- 11) in zone EP R40 Ślupsk - restricted only to aircraft referred to in Article VII(3) of the Implementing Agreement between the Government of the Republic of Poland and the Government of the United States of America to the Agreement between the Government of the Republic of Poland and the Government of the United States of America Concerning the Deployment of a Ballistic Missile Defence System in the Territory of the Republic of Poland Regarding Use of Land Areas and Airspace Surrounding the Ballistic Missile System Base, signed in Warsaw on 27 April 2015 (Journal of Laws 2016, item 234) - subject to the approval referred to in the aforementioned provision;
- 12) in ADIZ - upon notifying AMC Poland or the ATS responsible for the airspace in which the flight is to be performed of the location and time of the intended flights;
- 13) in construction works - subject to an approval from the entity managing given works and under conditions defined by that entity, and in a manner that does not endanger third party safety;
- 14) flights referred to in Paragraph 4.1 (2)-(4) performed over:
  - a) restricted areas referred to in Article 2(9) of the Surveying and Cartographic Act of 17 May 1989 (Journal of Laws 2017, item 2101, and Journal of Laws 2018, items 650 and 1669),
  - b) nuclear facilities referred to in Article 3(17) of the Atomic Law of 29 November 2000 (Journal of Laws 2018, items 792, 1669 and 2227),
  - c) areas, structures and facilities referred to in Article 5(2)(1)(a) and (b), Article 5(2)(2)(a) and (b), and Article 5(2)(3)(a) and (b) of the Act of 22 August 1997 on the protection of people and property (Journal of Laws 2018, items 2142 and 2245),
  - d) military garrisons and military training areas- subject to an approval from or for the purposes of the entity managing a given area, structure or facility;
- 15) flights performed over fuel pipelines, power and telecommunication lines, water dams and gates, and other facilities in open terrain, damage or destruction of which may be hazardous to human life and health or the environment, or cause serious property losses, shall be performed with special care.

5.2. For flights performed in relation to ensuring public order and safety, security and defence of the State, protection

of the State border, protection of the internal security of the State or search and rescue operations in:

- 1) zone P - Paragraph 5.1(9) shall not apply;
- 2) zone R area covering the airspace directly above national park areas - Paragraph 5.1(10) shall not apply.

5.3. Procedures for hazardous and emergency situations during flights are described in Paragraph 5.4 and in the recommended methodology for behaviour in hazardous situations included in the training curriculum, and in the operations manual referred to in Paragraph 7.1.

5.4. In the event that control of an unmanned aerial vehicle is lost or an unmanned aerial vehicle is lost, the operator shall immediately:

- 1) notify the competent ATS authority by telephone, by means of electronic communication or by means of the communication and information system referred to in Paragraph 4.5, and shall attempt to re-establish communications with the unmanned aerial vehicle;
- 2) provide the competent ATS authority with the following information:
  - a) the current position of the unmanned aerial vehicle as established by means of the emergency positioning device referred to in Paragraph 6.1(3)(d),
  - b) the last known location of the unmanned aerial vehicle in the case of malfunction of the emergency positioning device referred to in Paragraph 6.1(3)(d),
  - c) time when communications was lost,
  - d) the last recorded speed, height and course of the unmanned aerial vehicle,
  - e) estimated time until exhaustion of the fuel reserve or batteries powering the UAV's transmission system.

5.5. The condition referred to in Paragraph 5.1(1) shall not apply to operating flights where it was not possible to plan the flight earlier. The entity performing the operating flight shall immediately notify the air traffic service provider of its intention to perform the flight.

## Chapter 6

### Requirements regarding unmanned aerial vehicles

6.1. Operating, specialist, automatic and training flights shall be performed with an unmanned aerial vehicle that:

- 1) has been entered into the aircraft register kept by the President of the Polish Civil Authority or by an entity authorised to perform certain oversight or control activities under Article 22(3) of the Aviation Law Act, or into a foreign register or foreign list of civil aircraft;
- 2) is equipped:
  - a) in the case of an unmanned aerial vehicle being an aeroplane, with the following lights:
    - a green continuous light installed on the right wing, visible above and below the horizontal plane of the wing,
    - a red continuous light installed on the left wing, visible above and below the horizontal plane of the wing,
    - a white flashing light installed on the tip of the vertical stabiliser or, where there is no vertical stabiliser, on the upper surface of the fuselage in a manner that ensures omnidirectional emission of light,
  - b) in the case of an unmanned aerial vehicle being a multi-rotor craft, helicopter or aerostat, with a white flashing light installed on the upper surface of the fuselage in a manner that ensured omnidirectional emission of light;
- 3) is equipped with devices or systems installed on-board or as part of its ground equipment that enable it to:
  - a) maintain the planned flight parameters,
  - b) conduct on-going monitoring of flight parameters, including determination of:
    - the flight path,
    - the flight speed,
    - the flight height with a barometric altimeter,
    - the battery or fuel level,
    - the quality and strength of the communication signal between the unmanned aerial vehicle and its remote control station,
  - c) conduct basic positioning - determination of the current position, flight speed, flight height and heading of the

unmanned aerial vehicle for the purpose of providing the data to the air traffic service provider by means of a communication and information system or by telephone when requested by the ATS,

- d) conduct emergency positioning - determination, by the operator, of the current position of the unmanned aerial vehicle in the event of irrecoverable loss of control of the vehicle or in the event of interruption in communication between the unmanned aerial vehicle and its remote control station,
  - e) automatically perform the emergency procedure, including:
    - terminate the flight by an emergency landing, or
    - continue the flight on a route programmed before the flight, or
    - reach a destination planned before the flight,
  - f) record flight parameters from the startup of the unmanned aerial vehicle's system until the shutdown of that system;
- 4) is equipped with a camera that enables observation of the surroundings of the unmanned aerial vehicle to mitigate the risk of collision with another aircraft or an obstacle.

6.2. The condition referred to in Paragraph 6.1(1) shall not apply to unmanned aerial vehicles performing flights for special services referred to in Article 11 of 24 May 2002 on the Internal Security Agency and the Intelligence Agency.

## Chapter 7

### Operating conditions for unmanned aerial vehicles

7.1. As a condition for operating unmanned aerial vehicles in operating, specialist, training and automatic flights, an entity performing such flights is required to have and apply an operations manual in Polish and English that:

1) contains at least:

- a) the name and registered address of the aviation service provider along with its telephone number, e-mail address, Tax Identification Number (NIP) number of another register in which that provider is registered,
- b) a list of the unmanned aerial vehicles operated, complete with their identification signs,
- c) the full name, qualification certificate number and validity date of the third party liability insurance of the operator that performs or supervises the flight,
- d) an assessment of and information on methods of mitigating risks relating air operations performed,
- e) a general list of checks conducted before take-off and after landing,
- f) procedures and guidelines for performing air operations,
- g) general emergency procedures,
- h) a procedure for ensuring airworthiness inspections of the unmanned aerial vehicles operated;

2) is updated and amended as required to ensure its continuous validity;

3) includes preventive recommendations of the President of the Polish Civil Aviation Authority issued under Article 21(2)(15)(c) of the Aviation Law Act, if published.

7.2. As a condition for operating unmanned aerial vehicles in operating, specialist and training flights, the operator must wear a warning vest or, where the operator is not present in open space, or his or her station must be clearly marked.

7.3. Conditions referred to in Paragraph 7.2 shall not apply to:

- 1) state unmanned aerial vehicles;
- 2) unmanned aerial vehicles that perform flights for the purposes of the Customs and Tax Service;
- 3) flights performed by special services referred to in Article 11 of the Act of 24 May 2002 on the Internal Security Agency and the Intelligence Agency to execute statutory tasks regarding protection of the internal security and constitutional order of the State.

## Chapter 8

### Obtaining a permit to perform operating, specialist, training and automatic flights

8.1. A permit to perform operating, specialist, training and automatic flights is awarded following an application of an entity that intends to perform such flights, after the President of the Polish Civil Aviation Authority has verified whether the applying entity meets the requirements specified in Chapter 6 and in Paragraph 7.1.

8.2. The permit referred to in Paragraph 8.1 is awarded for 12 months.

8.3. The applicant shall attach the following documents to its application for a permit to perform operating, specialist, training or automatic flights:

1) the operations manual referred to in Paragraph 7.1, copies of documents certifying qualifications of the operators and a copy of the applicant's third party liability insurance, or

2) a statement that the applicant holds:

a) the operations manual referred to in Paragraph 7.1,

b) copies of documents certifying qualifications of the operators,

c) third party liability insurance

- for flights performed with state unmanned aerial vehicles or flights performed by special services referred to in Article 11 of the Act of 24 May 2002 on the Internal Security Agency and the Intelligence Agency to execute statutory tasks regarding protection of the internal security and constitutional order of the State.

8.4. The President of the Polish Civil Aviation Authority shall inform the air traffic service provider by means of electronic communication of entities that have been permitted to perform operating, specialist, automatic and training flights. The information shall be provided within 2 business days from the date on which the President of the Polish Civil Aviation Authority issued the permit.