

DRAFT COMMISSION REGULATION (EU) .../...

of **XXX**

laying down rules and procedures for the operation of unmanned aircraft

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) .../... [new BR] of the European Parliament and of the Council on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Regulation (EC) No 216/2008 ⁽¹⁾, and in particular Articles 45, 46, 47, and 51 thereof,

Whereas:

- (1) Unmanned aircraft system (UAS) operations should be regulated based on the nature and risk of the operation or activity. For these operations, which are divided into two separate categories, the ‘open’ and ‘specific’ categories of UAS operations, proportionate requirements should be applicable and adapted to the level of risk identified for each category.
- (2) In particular, UAS intended to be operated in the ‘open’ category, covering operations that present the lowest risks, should not be subject to classic aeronautical compliance procedures. This Regulation should, in consequence, set out requirements that address the risks posed by operations conducted with those UAS.
- (3) Operations in the ‘open’ category should be conducted with UAS classes that are defined in Regulation (EU) .../... [DA].
- (4) Operations in the ‘specific’ category should be conducted with UAS that are compliant with the technical requirements defined in the operational authorisation or in the declaration, as appropriate.
- (5) In order to ensure the implementation of this Regulation, appropriate transitional measures should be provided. In particular, it is necessary to allow Member States and stakeholders sufficient time to adapt their procedures to the new regulatory framework before this Regulation applies.
- (6) Dedicated provisions for recreational flight activities conducted in the framework of model clubs and associations should also be laid down.

⁽¹⁾ The OJ reference will be added when the new ‘Basic Regulation’ repealing Regulation (EC) No 216/2008 is adopted by the European Parliament and the Council. For referencing purposes, ‘Regulation (EU) .../... [new BR]’ is used in the proposed draft Regulation.

- (7) The measures provided for in this Regulation are based on Opinion No 01/2018 ⁽²⁾ issued by the European Aviation Safety Agency (EASA) in accordance with Article 65 of Regulation (EU) .../... [new BR].
- (8) The measures provided for in this Regulation are in accordance with the opinion of the committee established by Article 116 of Regulation (EU) .../... [new BR],

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

This Regulation lays down rules and procedures for:

- (a) the ‘open’ and ‘specific’ categories of UAS operations within the single European sky airspace;
- (b) the registration of UAS operators and unmanned aircraft (UA).

Article 2

Definitions

For the purposes of this Regulation, the following definitions apply:

1. ‘unmanned aircraft system (UAS)’ means the unmanned aircraft (UA) and the equipment to control the UA remotely;
2. “‘open” category” means a category of UAS operation that, considering the low risk involved, requires neither a prior authorisation by the competent authority nor a declaration by the UAS operator before the operation takes place;
3. “‘specific” category” means a category of UAS operation that, considering the risks involved, requires an authorisation by the competent authority before the operation takes place, taking into account the mitigation measures identified in an operational risk assessment, except for certain standard scenarios for which a declaration by the UAS operator is sufficient;
4. ‘unmanned aircraft system (UAS) operator’ means any legal or natural person who operates or intends to operate one or more UAS;
5. ‘unmanned aircraft (UA)’ means any aircraft operating or designed to operate autonomously or to be piloted remotely without a pilot on board;
6. ‘equipment to control unmanned aircraft remotely’ means any instrument, equipment, mechanism, apparatus, appurtenance, software or accessory that is necessary for the safe operation of a UA, other than a part, and which is not carried on board that UA;

⁽²⁾ EASA Opinion No 01/2018 ‘Introduction of a regulatory framework for the operation of unmanned aircraft systems in the “open” and “specific” categories’ (RMT.0230), available at <https://www.easa.europa.eu/document-library/opinions>.

7. 'visual line of sight (VLOS)' means a type of operation in which the remote pilot maintains continuous unobstructed and unaided visual contact with the UA, allowing the remote pilot to monitor the flight path of the UA in relation to other aircraft, persons, and obstacles for the purpose of maintaining separation from them and avoiding collisions;
8. 'light UAS operator certificate (LUC)' means a certificate issued to a UAS operator by a competent authority as per Subpart C of the Annex (Part-UAS) to this Regulation;
9. 'competent authority' means the authority designated by the Member State responsible for certification, authorisation, oversight, enforcement and registration in the Member State where the UAS operator has its principal place of business, or place of residence if the UAS operator is a natural person;
10. 'remote pilot' means a natural person responsible for safely conducting the flight of a UA by operating its flight controls, either by manual use of the remote controls or, when the UA flies automatically, by monitoring its course and remaining able to intervene and change its course at any time;
11. 'acceptable means of compliance (AMCs)' means non-binding standards adopted by EASA to illustrate the means to establish compliance with Regulation (EU) .../... [new BR] and its implementing rules;
12. 'alternative means of compliance' (AltMoCs) are those means of compliance that propose an alternative means to the existing AMCs or those that propose new means to establish compliance with Regulation (EU) No .../... [new BR] and its implementing rules for which no associated AMCs have been adopted by EASA.
13. 'automatic operation' means an operation in which the UAS executes preprogrammed instructions while the remote pilot is able to intervene at any time;
14. 'autonomous operation' means an operation during which a UA operates without the possibility for remote pilot intervention in the management of the flight;
15. 'certificate of airworthiness (CofA)' means a certificate attesting that an aircraft conforms to an approved design and is in a condition for safe operation in accordance with Annex I (Part 21) to Regulation (EU) No 748/2012 ⁽³⁾;
16. 'congested area' means any area in a city, town or settlement which is substantially used for residential, commercial or recreational purposes;
17. 'dangerous goods' means articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the ICAO Technical instructions for the safe transport of dangerous goods by air (Doc 9284-AN/905) at the latest version including any addenda or corrigenda, or those which are classified according to those instructions;

⁽³⁾ Commission Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations (OJ L 224, 21.8.2012, p. 1).

18. ‘electronic identification’ means a system that transmits the identity of the UA so that it can be identified without direct physical access to that UA;
19. ‘first-person-view (FPV) mode’ means a mode of operation of a UAS where the remote pilot navigates the UA using images from a camera installed on the UA;
20. ‘follow-me mode’ means a mode of operation of a UAS in which the UA constantly follows a person or a device within a predetermined radius;
21. ‘geo-awareness’ means a function that can detect a potential breach of airspace limitations and provides the remote pilot with sufficient information and an appropriate alert to allow the remote pilot to take effective action to prevent that breach;
22. ‘guidance material (GM)’ means non-binding material developed by EASA which helps to illustrate the meaning of a requirement or a specification and is used to support the interpretation of Regulation (EU) .../... [new BR], its implementing rules and acceptable means of compliance;
23. ‘hazard’ means a condition or an object with the potential to cause injuries, damage, loss of material or a reduction in the ability to perform a prescribed function;
24. ‘model aircraft club or association’ means an organisation legally established in a Member State for the purpose of conducting leisure flights, air displays, sport or competition activities with UAS;
25. ‘Part-UAS’ means the rules applicable to the operation of a UAS that falls into the ‘open’ or the ‘specific’ category, as laid down in the Annex (Part-UAS) to this Regulation;
26. ‘privately built UAS’ means a UAS assembled or manufactured for the manufacturer’s own use; this does not include UAS assembled from a set of parts placed on the market by the manufacturer as a single ready-to-assemble kit;
27. ‘remote pilot competency’ means a combination of skills, knowledge and conduct required for a remote pilot to perform a task to the prescribed standard;
28. ‘single European sky airspace’ means the airspace above the territory to which the Treaties apply, as well as any other airspace where Member States apply Regulation (EC) No 551/2004 ⁽⁴⁾, in accordance with Article 1(3) of that Regulation;
29. ‘specific operations risk assessment (SORA)’ means the methodology to assess the risks of a UAS operation in the ‘specific’ category, and determine the corresponding mitigation measures;
30. ‘standard scenario’ means a description of a UAS operation in the ‘specific’ category, for which mitigation measures have been determined based on a risk assessment (e.g. SORA), and adopted by EASA in its AMCs or in the AltMoCs provided to EASA by a competent authority;

⁽⁴⁾ Regulation (EC) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European sky (the airspace Regulation) (OJ L 96, 31.3.2004, p. 20).

31. ‘unmanned aircraft (UA) observer’ means a natural person who, by unaided visual observation of the UA, assists the remote pilot in safely conducting the flight.

Article 3

Principles applicable to all UAS operations

1. Safety rules shall be proportionate to the risk of the operation.
2. The operator of the UAS is responsible for the safety of its operations.
3. The remote pilot is responsible for the safe conduct of each individual UA flight.
4. UAS operators shall be registered in accordance with Article 7 of this Regulation.

Article 4

The ‘open’ category of UAS operations

The ‘open’ category of UAS operations shall comply with the requirements of Subpart A of the Annex (Part-UAS) to this Regulation.

Article 5

The ‘specific’ category of UAS operations

A UAS operation in the ‘specific’ category shall be subject to a prior operational risk assessment and to the application of the identified mitigation measures, in accordance with:

1. the requirements of Subpart B of the Annex (Part-UAS) to this Regulation;
2. the declaration made in accordance with a standard scenario, except when the UAS operator holds an LUC with privileges to authorise its own operations in accordance with Subpart C of the Annex (Part-UAS) to this Regulation; or
3. the authorisation issued by the competent authority, or by a UAS operator that holds an LUC with privileges to authorise its own operations in accordance with Subpart C of the Annex (Part-UAS) to this Regulation.

Article 6

UAS operations conducted in the framework of model clubs and associations

For UAS operations conducted in the framework of model clubs or associations, the following apply:

1. the competent authority may issue an operational authorisation, in accordance with UAS.SPEC.040, to a model club or association without further demonstration of compliance, on the basis of the model club’s or association’s established procedures, organisational structure, and management system;
2. operational authorisations granted under this Article shall include the conditions and limitations of, as well as the deviations from, the requirements of the Annex (Part-UAS) to this Regulation;
3. this authorisation shall be limited to the territory of the Member State where the authorisation was issued.

Article 7

Registration of UAS operators and their UA

1. Each operator shall register itself, and where applicable, its UA, in the Member State where the operator has its principal place of business or place of residence in accordance with Subpart A and Subpart B of the Annex (Part-UAS) to this Regulation.
2. Each registered UAS operator shall obtain a registration number according to the format defined by EASA.
3. Member States shall ensure that their registries are digital and interoperable. Records shall be updated, accurate, secure and accessible in real time by authorised authorities, organisations or persons.
4. If a Member State designates one or more entities, different from the competent authority referred to in Article 8(1), then:
 - (a) the areas of competence of each entity or competent authority shall be clearly defined; and
 - (b) coordination shall be established between the designated entities and the competent authorities to ensure the effective implementation of this Regulation.

Article 8

Designation of the competent authority

1. A Member State shall designate a competent authority with the following responsibilities:
 - (a) issue certificates of remote pilot competency;
 - (b) issue authorisations, acknowledge receipt of declarations, and oversee 'specific' category UAS operations;
 - (c) establish airspace restrictions;
 - (d) enforce this Regulation in respect of UAS operators and remote pilots.
2. If a Member State designates more than one entity as a competent authority:
 - (a) the areas of competence of the competent authority shall be clearly defined; and
 - (b) coordination shall be established between the designated competent authorities and the entities referred to in Article 7(4) to ensure the effective implementation of this Regulation.
3. The competent authority shall:
 - (a) have a suitable organisational structure, appropriately documented procedures, and adequate resources; and
 - (b) employ or have access to personnel with sufficient knowledge, professional integrity, experience and training to perform the allocated tasks.
4. Member States shall ensure that the personnel of the competent authority do not perform activities related to this Regulation when there is evidence that this could result,

directly or indirectly, in a conflict of interest, in particular when related to their family or financial interests.

Article 9

Tasks of the competent authority

In the framework of the competencies allocated by the Member States in accordance with Articles 7 and 8 of this Regulation, the competent authority shall:

1. examine documents, records and reports relevant to UAS operations, remote pilots or UAS operators;
2. develop a risk-based oversight system for UAS operators who hold a declaration, an authorisation or a certificate for a UA, in which audit planning is driven by the risk profile and the safety performance of the organisation and in which execution of the audits focuses on risk management in addition to compliance;
3. provide guidance for the community of UAS operators that is intended to promote the safety of UAS operations, including the dissemination of any updated regulations that affect UAS operations;
4. inspect, as required, UAS, remote pilots, and UAS operators to assess their compliance with this Regulation;
5. have a system to detect and analyse any non-compliance of declared UAS operators, or of UAS operators that it has authorised or certified;
6. issue, maintain, amend, suspend, limit or revoke authorisations, and issue, suspend, or revoke certificates required to carry out UAS operations in the ‘open’ and ‘specific’ categories, or impose other measures or sanctions, as necessary;
7. establish, maintain and keep updated, secure and accessible in real time by authorised persons, one or more registers of operational declarations, operational authorisations, certificates of remote pilot competency and LUCs;
8. disseminate safety information, when necessary.

Article 10

Means of compliance

1. The competent authority shall establish a system to consistently evaluate all AltMoCs used by itself, or by organisations and persons under its oversight, to ensure that they allow compliance with Regulation (EU) .../... [new BR] and its implementing rules to be established.
2. The competent authority shall evaluate all AltMoCs proposed by an organisation in accordance with UAS.SPEC.110 and UAS.LUC.110, by analysing the documentation provided and, if considered necessary, by inspecting the organisation.
3. When the competent authority finds that the AltMoCs are in accordance with Regulation (EU) .../... [new BR] and its implementing rules, it shall, without undue delay:

- (a) notify the applicant that the AltMoCs may be implemented and, as appropriate, amend the operational authorisation or certificate of the applicant accordingly;
 - (b) notify EASA of the AltMoCs' content and provide copies of all the relevant documentation; and
 - (c) inform all other Member States of any AltMoCs that were accepted.
4. When the competent authority itself uses AltMoCs to achieve compliance with Regulation (EU) .../... [new BR] and its implementing rules, it shall:
 - (a) make those AltMoCs available to all organisations and persons under its oversight; and
 - (b) without undue delay, notify EASA.
5. The competent authority shall provide EASA with a full description of the AltMoCs, including any revisions to procedures that may be relevant, as well as an assessment that demonstrates that the implementing rules are complied with.

Article 11

Airspace conditions for UAS operations

1. Member States may establish airspace restrictions on zones in which one or more of the following conditions applies:
 - (a) certain UAS operations are not permitted without prior authorisation or are not permitted at all;
 - (b) access is only allowed for certain UAS classes;
 - (c) access is only allowed for UAS equipped with electronic identification and/or geo-awareness systems;
 - (d) UAS operations comply with the specified environmental standards.
2. Member States may define airspace in which UAS operations are exempted from one or more of the 'open' category requirements of this Regulation, and in which operators are not required to hold an authorisation or submit a declaration.
3. Member States shall publish the information on airspace established in accordance with paragraphs 1 or 2 of this Article, as well as on how, if required, authorisation may be obtained, in a manner and format established by EASA.

Article 12

Safety information

1. Competent authorities and market surveillance authorities, as designated according to Regulation (EU) .../... [DA], shall cooperate on safety matters, and establish procedures for an efficient exchange of safety information.

2. Each UAS operator shall report to the competent authority any occurrence and any other safety-related information regarding its UAS, in compliance with Regulation (EU) No 376/2014 ⁽⁵⁾.
3. EASA and the competent authorities shall collect, analyse and disseminate safety information concerning UAS operations in their territory in accordance with Regulation (EU) .../... [new BR] and its implementing rules.
4. Upon receiving any of the information referred to in paragraphs 1, 2 or 3 of this Article, EASA or the authority that is competent for the corresponding domain of competence shall take appropriate measures to address any safety issues.
5. If the competent authority takes measures under paragraph 4 of this Article, it shall immediately notify all persons or organisations that need to comply with those measures under Regulation (EU) .../... [new BR] and its implementing rules. The competent authority shall also notify EASA, if EASA has not already been informed, and when combined action is required, the other Member States concerned.

Article 13

Derogations and limitations

UAS operators may continue to operate UAS made available on the market before the applicability of Regulation (EU) .../... [DA]:

1. in subcategory A1 of the ‘open’ category, as defined in UAS.OPEN.020, or in the ‘specific’ category in accordance with Subpart B of the Annex (Part-UAS) to this Regulation, provided that the UA has a maximum take-off mass (MTOM) of less than 250 g, including its payload;
2. in subcategory A3 of the ‘open’ category, as defined in UAS.OPEN.040, or in the ‘specific’ category in accordance with Subpart B of the Annex (Part-UAS) to this Regulation, provided that the UA has an MTOM between 250 g and 25 kg, including its payload.

Article 14

Conversion of authorisations, declarations and certificates

1. Authorisations and declarations for UAS operators, as well as certificates of remote pilot competency, issued on the basis of national legislation, prior to the applicability date of this Regulation, shall remain valid until ... [1 year after the entry into force of this Regulation].
2. Member States shall, by the end of the period specified in paragraph 1, have converted their existing certificates of remote pilot competency and their authorisations or declarations for UAS operators into those required by this Regulation, provided that the

⁽⁵⁾ Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18).

level of safety ensured by such authorisations, declarations and certificates is equivalent to the level of safety provided for by this Regulation.

Article 15

Entry into force and application

1. This Regulation shall enter into force on the day following that of its publication in the *Official Journal of the European Union*.

It shall apply from ... [6 months after the entry into force of this Regulation].

2. However:

- (a) by way of derogation from paragraph 1, Member States may decide not to apply Article 7(1) until ... [9 months after the entry into force of this Regulation].
- (b) by way of derogation from paragraph 1, Member States may decide not to apply this Regulation to UAS operations conducted within model clubs and associations until ... [3 years after the entry into force of this Regulation].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission
The President
[...]