The European UAS Regulation

Your safety is our mission.
The Specific Category
Specific Category

Definition

- It is a UAS operation exceeding the limitations defined in the ‘open’ category.
- Examples of UAS operations in the specific category:
  - BVLOS
  - with a UAS with MTOM> 25 kg
  - higher than 120m
  - with the purpose of dropping material
  - in urban environment with UAS with a MTOM> 4 kg or without proper CE class mark

- Remote pilot minimum age 16, unless supervised (it may be reduced to 14)
Specific Category – Risk Assessment

SORA
(Specific Operation Risk Assessment)

ConOps description

Overflown area

Airspace

Operational conditions

UA characteristics dimension

Operational safety objectives (OSO) and mitigations for a safe and secure flight

• Flight conditions
• Operational limitations,
• Remote pilot and other personnel competencies
• Technical requirements of the UAS
• Security and privacy

Specific assurance and integrity level (SAIL)

• SAIL I & II: low risk
• SAIL III & IV: medium risk
• SAIL IV & V: high risk

Included in the AMC to Regulation (EU) 2019/945 published on EASA website
Specific Category – Standard Scenario

Developed by EASA as simplification for the UAS operator

- Low risk operational scenario
- Detailed mitigation measures easy to be implemented
- Appendix to regulation (EU) 2019/947

Declaration

Confirmation of receipt and completeness
Opinion on Standard Scenarios

• Operations based on declarations, it will be Appendices to the IA
• Published on 7/11/2019: 2 STS (based on scenarios already used in some MS)
  • **STS-01**: VLOS, below 120m in urban environment, with UA MTOM<25kg
Opinion on Standard Scenarios

- **STS -02**: BVLOS, below 120m in sparsely populated area environment, with UA MTOM<25kg
  - range <2km when using airspace observers (AO), otherwise <1km
Opinion on Standard Scenarios

- Remote pilot competency
  - Certificate of remote pilot theoretical knowledge for operations in the STS issued by the CA or by an entity recognised by the CA after:
    - online training course and examination as in open category
    - additional theoretical knowledge examination provided by the CA or by an entity recognised by the CA;
    - validity 5 years, renewal subject to the demonstration of above competencies or after a seminar
Opinion on Standard Scenarios

• Remote pilot competency (cont.)
  • accreditation of completion of the STS-01 or STS-02 practical skill training, issued by an entity recognised by the CA or by a UAS operator that has declared compliance with:
    • STS-01 or STS-02 and
    • the requirements in listed in Appendix 3
Opinion on Standard Scenarios

Declaration to conduct an STS

STN-x
Operational declaration

Data protection: Personal data included in this declaration is processed by the competent authority pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). It will be processed for the purposes of the performance, management and follow up of the oversight activities according to Regulation (EU) 2019/947.

If you require further information concerning the processing of your personal data or you wish to exercise your rights (e.g. to access or rectify any inaccurate or incomplete data), please refer to the contact point of the competent authority.

The applicant has the right to make a complaint regarding the processing of the personal data at any time to the national Data Protection Supervisory Authority.

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I hereby declare that:

- I comply with all the applicable provisions of Regulation (EU) 2019/947 and with STS-5; and appropriate insurance cover will be in place for every flight made under the declaration, if required by Union or national law.

| Date | Signature or other verification |
|--------------------------------|

Declaration to provide practical skill training for an STS

STN-x
Declaration of UAS operators that intend to provide practical skill training and assessment of remote pilots

Data protection: Personal data included in this declaration is processed by the competent authority pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). It will be processed for the purposes of the performance, management and follow up of the oversight activities according to Regulation (EU) 2019/947.

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I hereby declare that:

- I have submitted the operational declaration for STS-x;
- I comply with the requirements defined in Appendix 3 to the Annex to Regulation (EU) 2019/947; and
- when operating a UAS in the context of training activities for STS-5, I comply with all the applicable provisions of Regulation (EU) 2019/947, including requirements for operations under STS-5.

| Date | Signature or other verification |
|--------------------------------|

Opinion on Standard Scenarios

- Applicability:

Adoption of amendment expected by mid 2020
Specific Category Pre-Defined Risk Assessment

Developed by EASA as simplification for the UAS operator

Operational scenario

SORA
(Specific Operation Risk Assessment)

Package to submit application
(AMC to the regulation)

NAA

Application for authorisation

Operational authorisation
Specific Category Pre-defined Risk Assessment

- Acceptable mean of compliance (AMC) to Article 11 of the IA
- 1\textsuperscript{st} PDRA Published as AMC and GMs to the IA (AMC2 Article 11)
  - \textbf{PDRA-01}: BVLOS, below 120m, in controlled airspace over sparsely populated area, with UA MTOM<25kg

\textbf{BVLOS}
Using a UAS with automatic modes

RP = remote pilot
AO = airspace observer
Specific Category Pre-defined Risk Assessment

- Acceptable mean of compliance (AMC) to Article 11 of the IA
- 1st PDRA Published as AMC and GMs to the IA (AMC2 Article 11)
  - **PDRA-01**: BVLOS, below 120m, in controlled airspace over sparsely populated area, with UA MTOM<25kg

RP = remote pilot
AO = airspace observer

**BVLOS**
Using airspace observers (AO)
No limit in the number of AOs however no gaps between the zones covered, needs to be ensured
Specific category – PDRA in development

- PDRAs mirroring STS 01 and 02 to allow the same operations however with a UAS without C5 or C6 class marking
- **PDRA-02**: BVLOS, below 120m in uncontrolled airspace, over sparsely populated area, with UA <3m dimensions
- **PDRA-03**: BVLOS, in restricted airspace, over sparsely populated area, with UA <3m dimensions
- NPA planned for 2020
Specific Category — Certification of UAS

Risk assessment (SORA)

Low risk (SAIL I and II)
- CE class mark in case of STS
- UAS design may be covered by the operational authorisation provided to the UAS operator
- Manufacturer may apply to EASA for (R)TC*

Medium risk (SAIL III and IV)
- UAS design may be covered by the operational authorisation provided to the UAS operator
- Manufacturer may apply to EASA for (R)TC*

High risk (SAIL V and VI)
- (R)TC* issued by EASA mandatory

No mitigations possible in the specific category

Certified category
- (R)TC* issued by EASA mandatory

*(R)TC=(restricted) Type Certificate according to Part 21
Specific Category Cross-Border Operations

Operation in the Member State of registration

- Operational authorisation
  - Risk assessment
  - Mitigations
  - Operational safety objectives

  Authorised
  NAA of MS of registration

Operation in another Member State

- Statement of acceptance
  - Revised mitigations for:
    - local airspace,
    - terrain,
    - population
    - climate

  Accepted
  NAA of MS of operation
Specific Category Cross Border Operations

Operation in the Member State of registration:
- Declaration
- Confirmation of receipt and completeness

Operation in another Member State:
- Declaration
- Confirmation of receipt and completeness

NAA MS of reg.

NAA MS of oper.
The Light UAS Operator Certificate (LUC)

Voluntary Certification

Demonstrate capability to assess the risk of an operation, based on SMS requirements

NAA MS of registration

Possible privileges

Operate according to standard scenario without submitting a declaration

Self authorise operations according to a predefined risk assessment

Self authorise new operations, not covered by a predefined risk assessment

A LUC is valid in all EU Member States, without additional demonstrations
The ‘Specific’ Category - Summary

Four possible options for the UAS operator

1. AMC1 to Art 11 to Reg. (EU) 2019/947
2. AMC2 to Art 11 to Reg. (EU) 2019/947
3. Appendix to Reg. (EU) 2019/947
4. Part C to Reg. (EU) 2019/947

Obtain privileges like
- Conduct operations covered by STS without submit a declaration
- Conduct operations covered by PDRA without ask for authorisation
- Assess the risk of new operations through SORA and conduct the operation without ask for authorisation

Operational authorisation

Start the operation
Timeline

Entry into force (1st July 2019)

Applicability (1st July 2020)

End of transitional period (1st July 2022)

- Operations in the specific category according to EU Regulation
- Pre-defined risk assessments published by EASA
- Standard Scenarios adopted by EC

• Member State shall convert national authorisations, certificates and declarations according to the EU Regulation
• MS may define geographical zones
You are the pilot!

https://easa.europa.eu/drones/