

The European UAS Regulation

Your safety is our mission.



The **Specific Category**

Your safety is our mission.

An Agency of the European Union



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

- higher than 120m
- with a UAS with MTOM> 25 kg
 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

to Regulation (EU) 2019/945 published on EASA website



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

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 Category – Standard Scenario

Developed by EASA as simplification for the UAS operator









Appendix to regulation (EU) 2019/947

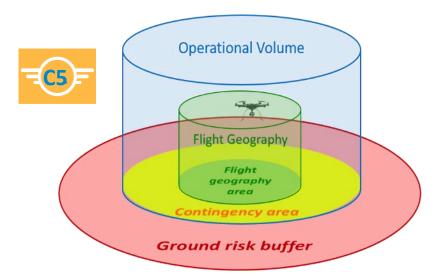








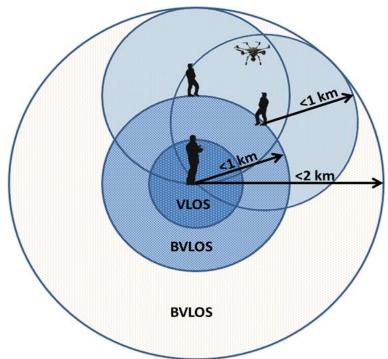
- Operations based on <u>declarations</u>, it will be Appendices to the IA
- Published on 7/11/2019: 2 STS (based on scenarios already used in some MS)
 - STS-01: VLOS, below 120m in urban environment, with UA MTOM<25kg





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





BVLOS

Using a Airspace observers

BVLOS

Using a UAS with automatic modes



Remote pilot competency

- Certificate of remote pilot <u>theoretical knowledge</u> 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



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



Declaration to conduct an STS



STS-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.

UAS operator registration number	
UAS operator name	
UAS manufacturer	
UAS model	

I hereby declare that:

- $-\,$ I comply with all the applicable provisions of Regulation (EU) 2019/947 and with $\underline{\text{STS.x}};$ 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	
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Declaration to provide practical skill training for an STS



STS-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 firee 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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UAS	operator	registration
number		

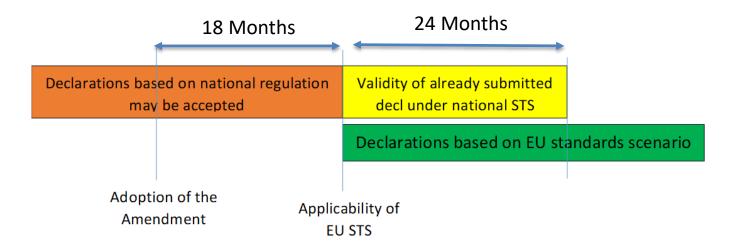
UAS operator name

I hereby declare that:

- I have submitted the operational declaration for STS-x;
- 1 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.x, I comply with all the applicable provisions of Regulation (EU) 2019/947, including requirements for operations under STS.x



Applicability:



Adoption of amendment expected by mid 2020



Specific Category Pre-Defined Risk Assessment

Developed by EASA as simplification for the UAS operator







Package to submit application (AMC to the regulation)









Application for authorisation



Operational authorisation





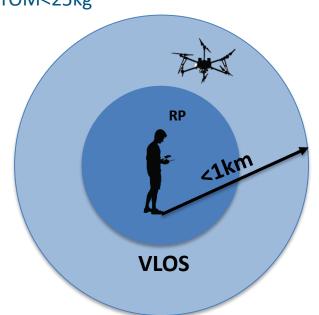
Specific Category Pre-defined Risk Assessment

- Acceptable mean of compliance (AMC) to Article 11 of the IA
- 1st PDRA Published as <u>AMC and GMs</u> 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 a UAS with automatic modes





Specific Category Pre-defined Risk Assessment

- Acceptable mean of compliance (AMC) to Article 11 of the IA
- 1st PDRA Published as <u>AMC and GMs</u> 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

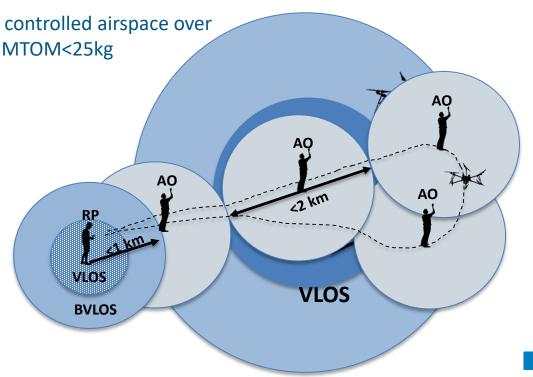
Using airspace observers (AO)

No limit in the number of AOs however no gaps

between the zones

covered, needs to be

EASA_{ed}



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 <u>may</u> 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



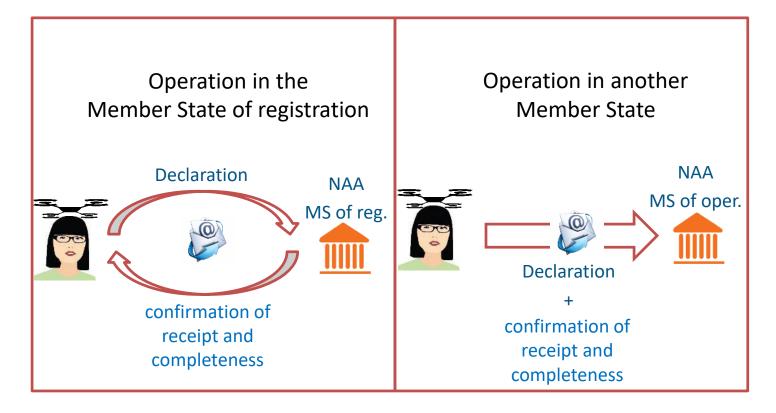


Specific Category Cross-Border Operations





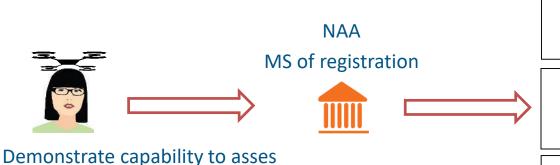
Specific Category Cross Border Operations





The Light UAS Operator Certificate(LUC)

Voluntary Certification



the risk of an operation, based on

SMS requirements

Possible privileges

Operate according to standard scenario without submitting a declaration

Self authorise operations according to a predefined risk assessment

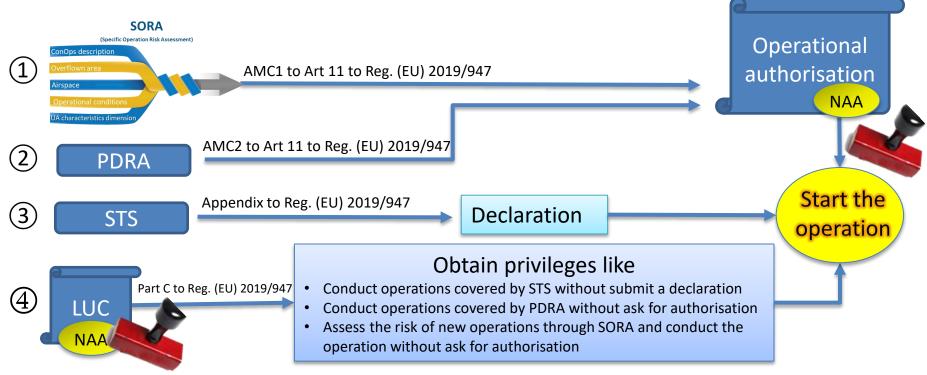
Self authorise new operations, not covered by a predefined risk assessment

A LUC is valid in all EU Member States, without additional demonstrations



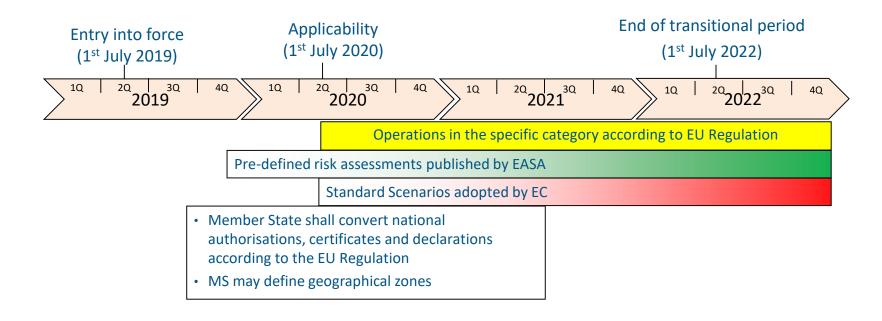
The 'Specific' Category - Summary

Four possible options for the UAS operator





Timeline





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You are the pilot!



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

Your safety is our mission.