



STS Standard Scenario for drones Study Guide

STS-01 & STS-02 Theory Examination Preparation - Luxembourg Edition

A comprehensive learning resource covering all eight EASA subject areas for the Standard Scenario theory examination, with national references for the Luxembourg Civil Aviation Authority (Direction de l'Aviation Civile - DAC).

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PART I

Regulatory Framework

The legal foundation of drone operations in Europe - from the category system to the specific rules governing Standard Scenarios.



CHAPTER 01

The EU Drone Regulatory Framework

Before you can understand the Standard Scenarios, you need to understand the regulatory system they sit within. The European Union has built a comprehensive framework for drone operations that applies across all member states. This chapter gives you the foundation - the category system, the role of Standard Scenarios within it, and the key regulations you need to know.

1.1 The Three Operational Categories

In the European Union, all drone operations are classified into one of three risk-based categories: **Open**, **Specific**, and **Certified**. The category your operation falls into determines what authorisations, training, and equipment you need.

The **Open Category** covers the lowest-risk operations. If your flight stays within defined limits - low altitude, light drone, visual line of sight, away from crowds - you can fly without any special authorisation. You need basic registration and a competency certificate, but no government approval for each flight.

The **Specific Category** covers operations that carry a higher level of risk - for example, flying a heavier drone over a populated area, or flying beyond visual line of sight. These operations require either a full risk assessment (known as SORA) or compliance with a pre-approved Standard Scenario. This is where STS-01 and STS-02 sit.

The **Certified Category** covers the highest-risk operations - those comparable to manned aviation in terms of the risk they pose. This includes operations over assemblies of people with large drones, or carrying passengers. Certified operations require type certificates, operator certificates, and pilot licensing equivalent to manned aviation standards. The Certified Category is outside the scope of the STS examination.

Key Concept

The category system is risk-based, not aircraft-based. The same drone can be operated in different categories depending on how, where, and under what conditions it is flown.

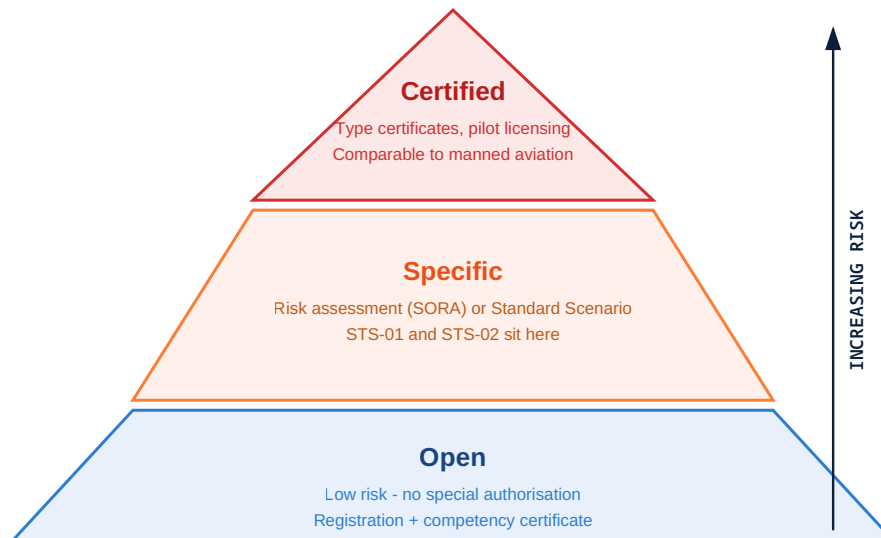


Figure 1.1 - The three EASA operational categories

1.2 The Open Category - Context and Boundaries

The Open Category is divided into three subcategories - A1, A2, and A3 - each with its own rules about where you can fly and how close to people.

Subcategory A1 covers the lowest-risk operations close to people. With drones under 250 grams (whether privately built or meeting the **C0** class requirements), the remote pilot may fly over uninvolved persons but never over assemblies of people. **C1** class drones are also permitted in A1, but with a stricter rule: *no intentional flight over uninvolved persons*. This is the least restrictive subcategory.

Subcategory A2 permits flights close to people with drones meeting the C2 class requirements, provided the pilot holds an A2 certificate of competency and maintains a safe horizontal distance of at least 30 metres from uninvolved persons. This distance can be reduced to 5 metres when the drone is in low-speed mode.

Subcategory A3 permits flights far from people - in areas where it is reasonably expected that no uninvolved person will be endangered - using drones up to 25 kilograms meeting C2, C3, or C4 class requirements.

All Open Category operations share certain limits:

- Maximum altitude of **120 metres** above ground level
- Visual Line of Sight must be maintained at all times
- No transport of dangerous goods
- No dropping of materials

- The UAS operator must be registered with the national aviation authority - in Luxembourg, this is the Direction de l'Aviation Civile (DAC), and registration is completed online via the DAC's drone portal at guichet.public.lu (the Luxembourg eGovernment platform)
- The remote pilot must hold at least a basic online competency certificate (A1/A3)

Exam Tip

The distinction between *operator* and *pilot* is tested. The operator is the person or organisation responsible for the operation (and must be registered). The pilot is the person who actually flies the aircraft. They may be different entities.

When an operation exceeds any of these Open Category limits - for example, flying in a populated area with a drone heavier than 4 kilograms, flying beyond visual line of sight, or flying above 120 metres - it falls into the Specific Category. Understanding where the Open Category ends and the Specific Category begins helps you recognise which operations require STS compliance.

1.3 The Specific Category - When It Applies

The Specific Category exists for operations that carry more risk than the Open Category permits but do not require the full oversight of the Certified Category. If your intended operation exceeds any Open Category limit, you are in the Specific Category.

Normally, a Specific Category operation requires you to conduct a full **Specific Operations Risk Assessment (SORA)** - a complex, multi-step process that assesses both air risk and ground risk and prescribes mitigations accordingly. You then submit this assessment to the national competent authority and receive an operational authorisation before you can fly.

However, the EU has recognised that many Specific Category operations follow common, well-understood patterns. Rather than requiring every operator to conduct a bespoke SORA for these routine operations, the EU has defined **Standard Scenarios** - pre-approved compliance packages where the risk assessment has already been done. As long as your operation fits within the defined conditions, you can declare compliance and fly without a full SORA submission.

1.4 Standard Scenarios: What They Are and Why They Exist

A Standard Scenario is a pre-defined set of operational conditions, requirements, and mitigations that together describe a specific type of Specific Category operation. Think of it as a compliance template: someone has already done the risk assessment for you, and as long as you meet all the required conditions, you are legally authorised to fly.

There are currently two Standard Scenarios defined by the EU:

- **STS-01:** VLOS operations over a controlled ground area in a populated environment
- **STS-02:** BVLOS operations with airspace observers over a controlled ground area in a sparsely populated environment

To operate under a Standard Scenario, the operator submits a **declaration** to the national competent authority - not an application for authorisation. The declaration states that the operator and remote pilot meet all the conditions of the chosen scenario. There is no flight-by-flight government approval. Instead, the operator self-declares compliance, and the authority can audit at any time.

This self-declaration model places direct responsibility on the operator and pilot. You are not waiting for someone to check your work - you are affirming that your operation meets the standard. If an audit reveals that it does not, the consequences fall on you.

PART VIII

Test Questions

440 multiple-choice questions covering all five subject areas of the STS theoretical exam. Each question includes the correct answer and an expert explanation.

CHAPTER 16

Aviation regulations and legal framework

This chapter contains 96 test questions from the area *Aviation regulations and legal framework*.

Q001

In Luxembourg, which national competent authority oversees civil aviation safety and security, including UAS operator registration and Specific Category authorisations?

- A) Air Navigation Administration (ANA)
- B) Directorate of Civil Aviation (DAC) ✓**
- C) National Commission for Data Protection (CNPDP)
- D) Police Grand-Ducale

Explanation: The Directorate of Civil Aviation (DAC) is the competent authority of the Grand Duchy of Luxembourg for civil aviation safety and security. The DAC supervises UAS operator registration, processes declarations under (EU) 2019/947 and issues Specific Category authorisations. ANA provides air-navigation services, the CNPD supervises personal-data protection, and the Police Grand-Ducale enforces criminal law.

Q002

A Luxembourg-resident company wants to register as a UAS operator before its first STS-01 flight. Through which national online platform must the registration be submitted to the Directorate of Civil Aviation (DAC)?

- A) MyGuichet.lu ✓**
- B) Géoportail (drones.geoportail.lu)
- C) dac.gouvernement.lu/register
- D) ops.skeyes.be self-briefing portal

Explanation: UAS operator registration in Luxembourg is processed through the MyGuichet.lu online procedure on the national government services portal. Géoportail is used for UAS geographical-zone consultation, dac.gouvernement.lu is the DAC information site (no registration form is hosted there), and ops.skeyes.be is the AIS self-briefing portal for AIP and NOTAM.

Q003

Under Luxembourg's national drone framework, with fees in force from 14 January 2026, what amount is charged for a UAS operator registration or renewal application submitted via My-Guichet.lu?

- A) Free of charge
- B) EUR 25
- C) EUR 50
- D) EUR 10 ✓**

Explanation: Following the entry into force of Luxembourg's national drone regulatory framework on 14 January 2026, a fee of EUR 10 applies to each UAS operator registration or renewal application processed through MyGuichet.lu. The fee was introduced together with the wider national framework, which also added criminal penalties for non-compliance with UAS rules.

Q004

How long is a Luxembourg UAS operator registration certificate valid before it must be renewed with the Directorate of Civil Aviation (DAC)?

- A) 6 months
- B) 3 years
- C) 1 year, renewable within 90 days before expiry ✓**
- D) 5 years

Explanation: A UAS operator registration certificate issued by the DAC is valid for one year. It can be renewed within 90 days before the expiry date without affecting the anniversary date - a certificate expiring 4 March 2026 may be renewed from 4 December 2025 and the new certificate remains valid until 4 March 2027.

Q005

A 15-year-old wishes to act as remote pilot under STS-01 in Luxembourg. Under the national rules implementing (EU) 2019/947, is this permitted?

- A) Yes - the national minimum age in the Specific Category is 14.
- B) No - Luxembourg's minimum remote-pilot age in Open and Specific is 16; a 14- or 15-year-old may only be registered as UAS operator by a parent or guardian, not act as remote pilot. ✓**
- C) Yes - but only under STS-02.
- D) Yes - provided a parent gives written consent.

Explanation: Luxembourg has not exercised the Article 9(2)(a) derogation in (EU) 2019/947 to lower the minimum remote-pilot age below 16. The DAC confirms 16 as the minimum age for remote pilots in the Open and Specific categories. A minor aged 14 or 15 may be registered as UAS operator by a parent or guardian, but cannot act as remote pilot until reaching 16.

Q006

What did Luxembourg's new national drone regulatory framework, in force from late 2025 / early 2026, add to the EU baseline of (EU) 2019/947?

- A) Criminal penalties for non-compliance with UAS rules and a national fee schedule for registration and renewal ✓**
- B) A redefinition of the Open subcategories A1, A2 and A3
- C) New class identification labels beyond C0–C6
- D) Removal of the Standard Scenarios STS-01 and STS-02

Explanation: Luxembourg's national framework, effective in late 2025 with fees applying from 14 January 2026, added criminal penalties for non-compliance with UAS rules and a national fee schedule, on top of the EU baseline. The Open subcategories, class-marking labels and Standard Scenarios are defined by (EU) 2019/947 and (EU) 2019/945 and apply uniformly in all Member States.

Q007

After capturing footage of a public square during an STS-01 mapping flight, a Luxembourg-based operator must comply with national personal-data rules. Which national supervisory authority oversees GDPR compliance in Luxembourg?

- A) Directorate of Civil Aviation (DAC)
- B) Ministry of Mobility and Public Works
- C) Police Grand-Ducale
- D) National Commission for Data Protection - Commission nationale pour la protection des données (CNPD) ✓**

Explanation: The National Commission for Data Protection (CNPD) is Luxembourg's independent GDPR supervisory authority, organised by the Law of 1 August 2018. CNPD is the addressee for personal-data complaints - including those triggered by drone-camera footage. The DAC handles aviation safety, not personal data.

Q008

A Luxembourg STS pilot is doing an IMSAFE check. Under Luxembourg's Code de la Route - the national legal reference commonly used as the upper bound for remote-pilot fitness - what is the legal blood-alcohol limit for an experienced (non-novice) driver?

- A) 0.0 g/L
- B) 0.8 g/L
- C) 0.5 g/L blood (0.25 mg/L breath) for experienced drivers; 0.2 g/L blood (0.1 mg/L breath) for novice drivers (less than two years' experience), professionals and drivers under 18 ✓**
- D) 1.0 g/L

Explanation: Luxembourg's Code de la Route fixes the legal blood-alcohol limit at 0.5 g/L (0.25 mg/L breath) for experienced drivers and 0.2 g/L (0.1 mg/L breath) for novice drivers, professionals and drivers under 18. (EU) 2019/947 imposes the broader rule that a remote pilot must not be impaired by psychoactive substances; the Code de la Route values are the national reference applied to remote-pilot fitness assessment.

Q021

What is the validity period of a remote pilot certificate of competency issued by the Luxembourg Directorate of Civil Aviation (DAC)?

- A) 1 year
- B) 2 years
- C) 3 years
- D) 5 years ✓**

Explanation: The DAC issues remote pilot certificates with a validity of five years. Unlike the UAS operator registration certificate (valid one year), the pilot certificate runs for five years and must be revalidated before expiry to keep operational privileges under STS-01 and STS-02.

Q022

A French operator holding a Specific Category authorisation issued by the DGAC plans to run an STS-01 mission in Luxembourg. What must the operator do BEFORE the first flight?

- A) Submit the EASA cross-border declaration form via the DGAC for acknowledgement by the Luxembourg Directorate of Civil Aviation (DAC), in line with Article 13 of (EU) 2019/947, and consult Luxembourg's UAS geographical zones on Géoportail ✓**
- B) Nothing - STS-01 is auto-recognised across the EU with no host-state procedure.
- C) Notify the EASA cross-border desk only.
- D) File only a NOTAM via ops.skeyes.be.

Explanation: Article 13 of (EU) 2019/947 requires the operator to submit a cross-border declaration through the State of registration to the host competent authority before operating in another State. For Luxembourg, the declaration is acknowledged by the DAC, and the operator must also check Luxembourg's UAS geographical zones on Géoportail before the flight.

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