

Regulatory Framework for the certification/declaration of safety-related aerodrome equipment

EASA Webinar
26 September 2023

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Agenda

- Regulatory requirements in Regulation (EU) 2018/1139
- Essential requirements in Regulation (EU) 2018/1139
- Examples of ADR equipment
- Structure of the regulatory framework
- ADR operator and manufacturers' responsibilities
- Technical specifications
- Expected benefits
- Timelines

Provisions in Regulation (EU) 2018/1139

→ Definition

‘safety-related aerodrome equipment’ means any instrument, equipment, mechanism, apparatus, appurtenance, software or accessory **that is used or intended to be used to contribute to the safe operation of aircraft at an aerodrome;**

Provisions in Regulation (EU) 2018/1139

→ Article 34

1. A certificate shall be required in respect of aerodromes. That certificate shall cover the aerodrome and its safety-related equipment, **unless that safety-related equipment is covered by a declaration or certificate referred to in points (a) and (b) respectively of Article 35(1).**

Provisions in Regulation (EU) 2018/1139

→ Article 35

1. Taking into account the objectives and principles set out in Articles 1 and 4, and in particular the nature and risk of the activity concerned, the implementing acts referred to in Article 36 **may require organisations** involved in the design, production and maintenance of safety related aerodrome equipment used or intended for use at aerodromes subject to this Regulation to:

- (a) **declare** that such equipment complies with the detailed specifications established in accordance with implementing acts referred to in Article 36; or
- (b) hold a **certificate** in respect of that safety-related aerodrome equipment.

Provisions in Regulation (EU) 2018/1139

→ Article 35 (continued)

2. The certificate referred to in point (b) of paragraph 1 of this Article shall be issued upon application, when the **applicant has demonstrated that the equipment complies with the detailed specifications** established in accordance with implementing acts referred to in Article 36 adopted to ensure compliance with the essential requirements referred to in Article 33.

3. The **certificate** referred to in point (b) of paragraph 1 of this Article shall **specify the functionalities of the equipment**. That certificate may be amended to reflect the changes to those functionalities, in accordance with the implementing acts referred to in point (d) of Article 36(1).

4. The certificate referred to in point (b) of paragraph 1 of this Article may be **limited, suspended or revoked, when the equipment no longer complies** with the rules and procedures for issuing and maintaining such certificate, in accordance with the implementing acts referred to in point (d) of Article 36(1).

Provisions in Regulation (EU) 2018/1139

→ Article 36

1. In order to ensure the uniform implementation of and compliance with the essential requirements referred to in Article 33, for aerodromes and safety-related aerodrome equipment, the Commission shall, on the basis of the principles set out in Article 4 and with a view to achieving the objectives set out in Article 1, adopt **implementing acts** laying down detailed provisions concerning:

(b) the rules and procedures for establishing and notifying to an applicant the **detailed specifications** applicable to safety-related aerodrome equipment for the purposes of certification in accordance with Article 35(1);

(d) the rules and procedures for **issuing, maintaining, amending, limiting, suspending or revoking the certificates** for safety-related aerodrome equipment referred to in Article 35(1), and for the **situations in which such certificates are to be required**;

Provisions in Regulation (EU) 2018/1139

→ Article 36 (continued)

- (e) the rules and procedures for establishing the **detailed specifications** applicable to safety-related aerodrome equipment which is subject to a **declaration** in accordance with Article 35(1);

- (f) the rules and procedures for the **declaration**, in accordance with Article 35(1), in respect of safety-related aerodrome equipment, and for the situations in which such declarations are to be required;

- (g) the **privileges and responsibilities** of the **holders of the certificates** referred to in Articles 34 and 35(1), and of the **organisations making declarations** in accordance with Article 35(1);

Provisions in Regulation (EU) 2018/1139

→ Article 79

With regard to the safety-related aerodrome equipment referred to in Article 35, the **Agency** shall:

- (a) establish and notify to the applicant the **detailed specifications** for the safety-related aerodrome equipment which is subject to **certification** in accordance with Article 35;
- (b) establish and make available the **detailed specifications** for the safety-related aerodrome equipment which is subject to a **declaration** in accordance with Article 35;
- (c) be **responsible for the tasks related to certification, oversight and enforcement** in accordance with Article 62(2) with respect to the certificates for, and the declarations made in respect of safety-related aerodrome equipment in accordance with Article 35.

Essential requirements

- Safety-related aerodrome equipment, **including visual and non-visual aids**
 - Aids shall be fit for purpose, recognizable and provide unambiguous information to users under all intended operational conditions.
 - Safety-related aerodrome equipment shall function as intended under the foreseen operating conditions. Under operating conditions or in case of failure, safety-related aerodrome equipment shall not cause an unacceptable risk to aviation safety.
 - The aids and their electrical power supply system shall be so designed that failures do not result in inappropriate, misleading or insufficient information being given to users or in interruption of an essential service.

Essential requirements

- Safety-related aerodrome equipment, **including visual and non-visual aids** (continued)
 - Suitable means of protection shall be provided to avoid damage or disturbance to such aids.
 - Sources of radiation or the presence of moving or fixed objects shall not interfere with or adversely affect the performance of aeronautical communications, navigation and surveillance systems.
 - Information on operation and use of safety-related aerodrome equipment shall be made available to relevant staff, including clear indications of the conditions which may create unacceptable risks to aviation safety.

Examples of ADR Equipment

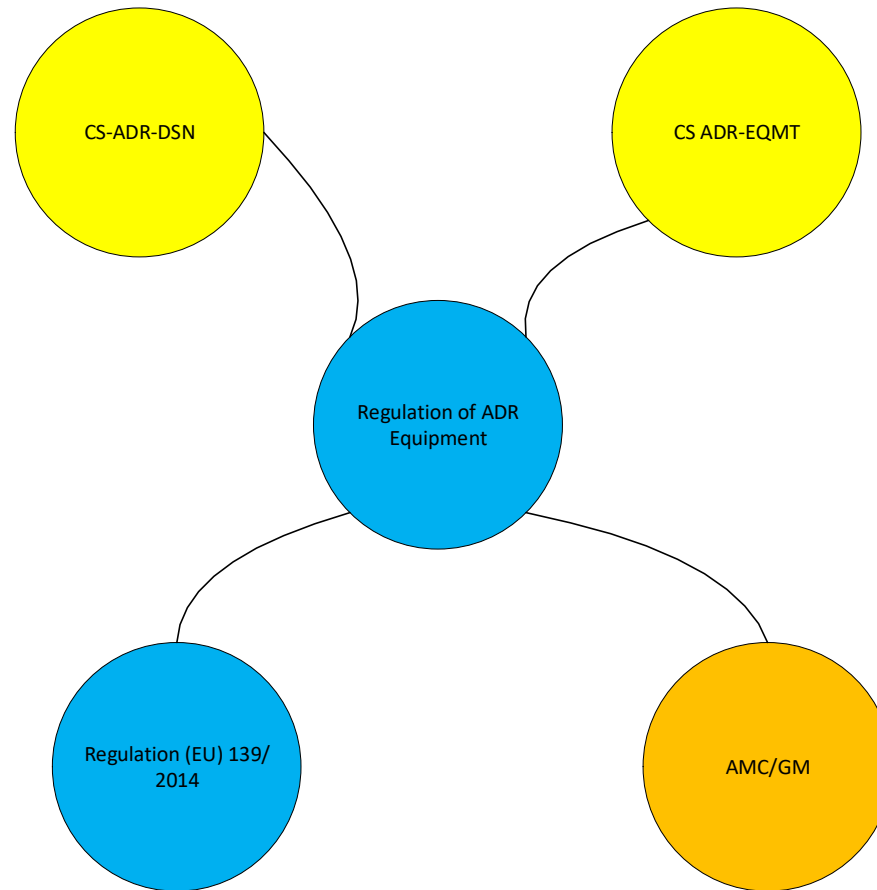
Ground based ADR equipment:

- Visual aids (lights, signs)
- AVDGS (Advanced Visual Docking Guidance System)
- Friction measurement devices
- FOD (Foreign Object Debris) Radar
- Avian Radar (bird movements)
- Runway Weather Information Systems
- Aircraft arresting systems

Other equipment

- Stand Allocation software
- Fire fighting foams
- Future innovative equipment

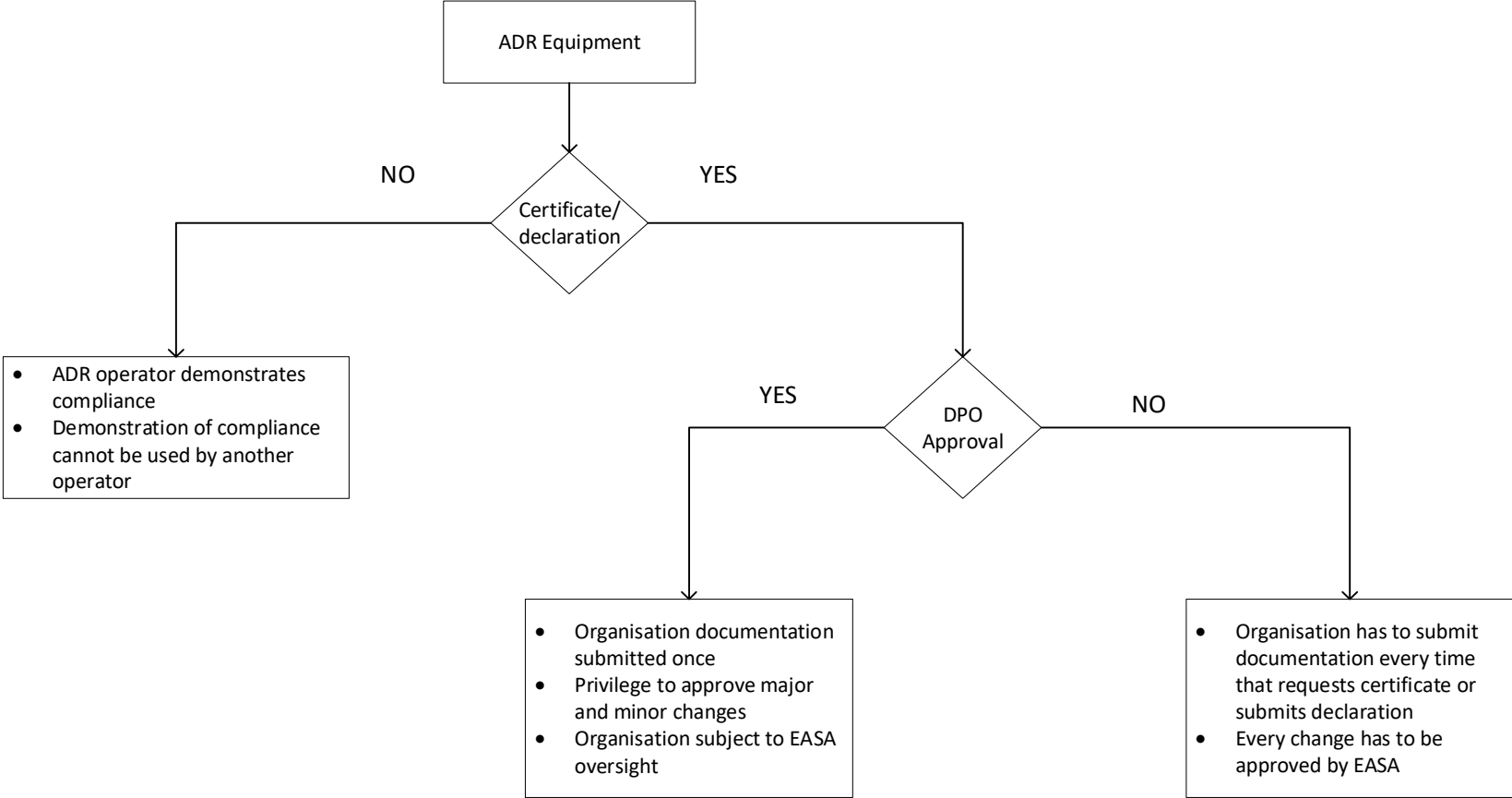
Structure of the Regulatory Framework



ADR Operator responsibilities



Manufacturer responsibilities



Technical specifications

- Based on ICAO documentation (where available)
- Industry standards (EUROCAE, ISO, ASTM, FAA, etc.)
- Developed by the Agency (in cooperation with affected stakeholders)

Note: All specifications will be subject to review and consultation before adoption

Expected benefits

- **Less administrative burden** for ADR operators and equipment manufacturers
- Certificates/declarations are **recognized** throughout EU without any further verifications
- **Level-playing field**
- **One-stop shop** for equipment manufacturers

Timelines (tentative)

- RMT.0161 Subtask 4
- Publication of NPA: 2023
- EASA Opinion: Q2/2024
- Publication of Regulation: Q2/2025
- AMC/GM and Specifications: Q2/2025

Thank you very much for your attention

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