

Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (Text with EEA relevance)

COMMISSION IMPLEMENTING REGULATION (EU) No 1207/2011

of 22 November 2011

laying down requirements for the performance and the interoperability of surveillance for the single European sky

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 552/2004 of the European Parliament and of the Council of 10 March 2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation)⁽¹⁾, and in particular Article 3(5) thereof,

Whereas:

- (1) The Commission has issued a mandate to Eurocontrol in accordance with Article 8(1) of Regulation (EC) No 549/2004 of the European Parliament and the Council of 10 March 2004 laying down the framework for the creation of the single European sky (the framework Regulation)⁽²⁾ to develop requirements for the performance and the interoperability of surveillance within the European air traffic management network (EATMN). This Regulation is based on the resulting mandate report of 9 July 2010.
- (2) Seamless operations are dependent on the coherence of the minimum requirements for the separation of aircraft applied within the airspace of the single European sky.
- (3) In order to ensure interoperability, common principles should be applied when surveillance data are exchanged between systems. In addition, minimal capabilities and performance applicable to airborne constituents of surveillance systems should be identified.
- (4) The capabilities of the airborne constituents of surveillance systems should give the flexibility to the air navigation service providers to choose the most appropriate ground based surveillance solutions for their particular environments.
- (5) The implementation of this Regulation should be without prejudice to the deployment of other surveillance applications and technologies bringing benefits in specific environments.
- (6) Operators need sufficient notice to equip new aircraft and existing fleets with new capabilities. This should be taken into account when defining dates for mandatory equipage.

Changes to legislation: Commission Implementing Regulation (EU) No 1207/2011 is up to date with all changes known to be in force on or before 24 December 2020. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) [View outstanding changes](#)

- (7) Criteria for possible exemptions, based in particular on economic or compelling technical consideration, should be identified allowing operators exceptionally not to equip specific types of aircraft with some of the required capabilities. Appropriate procedures should be established to allow the Commission to take decisions in this respect.
- (8) The 24-bit ICAO aircraft address should be assigned and operated in compliance with the International Civil Aviation Organisation (ICAO) requirements in order to ensure the interoperability of the air and ground surveillance systems.
- (9) The foundation established through the implementation of ADS-B 'Out' capabilities by aircraft operators should enable the deployment of ground applications and should also facilitate the deployment of future airborne applications.
- (10) The EATMN systems should support the implementation of advanced, agreed and validated concepts of operation for all phases of flight, in particular as envisaged in the ATM Master Plan for the development of the new generation European air traffic management system (SESAR).
- (11) The performance of the systems within the scope of this Regulation and of their constituents should be regularly assessed taking into account the local environment in which they operate.
- (12) The uniform application of specific procedures within the airspace of the single European sky is critical for the achievement of interoperability and seamless operations.
- (13) Spectrum used by surveillance systems should be protected to prevent harmful interferences. Member States should take the necessary measures in this respect.
- (14) This Regulation should not cover military operations and training as referred in Article 1(2) of Regulation (EC) No 549/2004.
- (15) With a view to maintaining or enhancing existing safety levels of operations, Member States should be required to ensure that the parties concerned carry out a safety assessment including hazard identification, risk assessment and mitigation processes. Harmonised implementation of these processes to the systems covered by this Regulation requires the identification of specific safety requirements for all interoperability and performance requirements.
- (16) In accordance with Regulation (EC) No 552/2004, implementing rules for interoperability should describe the specific conformity assessment procedures to be used to assess either the conformity or the suitability for use of constituents as well as the verification of systems.
- (17) In the case of air traffic services provided primarily to aircraft flying as general air traffic under military supervision, procurement constraints could prevent compliance with this Regulation.
- (18) The measures provided for in this Regulation are in accordance with the opinion of the Single Sky Committee,

Changes to legislation: Commission Implementing Regulation (EU) No 1207/2011 is up to date with all changes known to be in force on or before 24 December 2020. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation lays down requirements on the systems contributing to the provision of surveillance data, their constituents and associated procedures in order to ensure the harmonisation of performance, the interoperability and the efficiency of these systems within the European air traffic management network (EATMN) and for the purpose of civil-military coordination.

Article 2

Scope

- 1 This Regulation shall apply to the surveillance chain constituted of:
- a airborne surveillance systems, their constituents and associated procedures;
 - b ground-based surveillance systems, their constituents and associated procedures;
 - c surveillance data processing systems, their constituents and associated procedures;
 - d ground-to-ground communications systems used for distribution of surveillance data, their constituents and associated procedures.

[^{F12} This Regulation shall apply to all flights operating as general air traffic in accordance with instrument flight rules within the Single European Sky airspace with the exception of Article 7(3) and 7(4) which shall apply to all flights operating as general air traffic]

- 3 This Regulation shall apply to air traffic service providers which provide air traffic control services based on surveillance data, and to communication, navigation or surveillance service providers which operate systems laid down in paragraph 1.

Textual Amendments

- F1** Substituted by Commission Implementing Regulation (EU) 2020/587 of 29 April 2020 amending Implementing Regulation (EU) No 1206/2011 laying down requirements on aircraft identification for surveillance for the single European sky and Implementing Regulation (EU) No 1207/2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (Text with EEA relevance).

Article 3

Definitions

For the purpose of this Regulation, the definitions in Article 2 of Regulation (EC) No 549/2004 shall apply.

The following definitions shall also apply:

- (1) ‘surveillance data’ means any data item, time stamped or not, within the surveillance system that pertains to:

Changes to legislation: Commission Implementing Regulation (EU) No 1207/2011 is up to date with all changes known to be in force on or before 24 December 2020. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (a) aircraft 2D position;
 - (b) aircraft vertical position;
 - (c) aircraft attitude;
 - (d) aircraft identity;
 - (e) 24-bit ICAO aircraft address;
 - (f) aircraft intent;
 - (g) aircraft velocity;
 - (h) aircraft acceleration;
- (2) ‘operator’ means a person, organisation or enterprise engaged in or offering to engage in an aircraft operation;
 - (3) ‘ADS-B’ means automatic dependent surveillance — broadcast, a surveillance technique in which aircraft automatically provide, via a data link, data derived from on-board navigation and position-fixing systems;
 - (4) ‘ADS-B Out’ means the provision of ADS-B surveillance data from an aircraft transmit perspective;
 - (5) ‘harmful interference’ means interference that prevents the achievement of the performance requirements;
 - (6) ‘surveillance chain’ means a system composed of the aggregation of airborne and ground-based constituents used to determine the respective surveillance data items of aircraft, including the surveillance data processing system, if deployed;
 - (7) ‘cooperative surveillance chain’ means a surveillance chain requiring both ground and airborne components to determine surveillance data items;
 - (8) ‘surveillance data processing system’ means a system that processes all surveillance inputs received to form a best estimate of the current aircraft surveillance data;
 - (9) ‘aircraft identification’ means a group of letters, figures or a combination thereof which is either identical to, or the coded equivalent of, the aircraft call sign to be used in air-to-ground communications, and which is used to identify the aircraft in ground-to-ground air traffic services communications;
 - (10) ‘State aircraft’ means any aircraft used for military, customs and police purposes;
 - (11) ‘transport type State aircraft’ means fixed wing State aircraft that are designed for the purpose of transporting persons and/or cargo;
 - (12) ‘extrapolate’ means to project, predict or extend known data based upon values within an already observed time interval;
 - (13) ‘coasted’ means extrapolated for a period longer than the ground surveillance systems update period;
 - (14) ‘time of applicability’ means the time at which the data item has been measured by the surveillance chain or the time for which it has been calculated by the surveillance chain;

Changes to legislation: Commission Implementing Regulation (EU) No 1207/2011 is up to date with all changes known to be in force on or before 24 December 2020. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

- (15) ‘accuracy’ means the degree of conformity of the provided value of a data item with its actual value at the time when the data item is output from the surveillance chain;
- (16) ‘availability’ means the degree to which a system or component is operational and accessible when required for use;
- (17) ‘integrity’ means the degree of undetected (at system level) non-conformity of the input value of the data item with its output value;
- (18) ‘continuity’ means the probability that a system will perform its required function without unscheduled interruption, assuming that the system is available at the initiation of the intended operation;
- (19) ‘timeliness’ means the difference between the time of output of a data item and the time of applicability of that data item.

Article 4

Performance requirements

1 Air navigation service providers shall ensure seamless operations within the airspace under their responsibility and at the boundary with adjacent airspaces by applying appropriate minimum requirements for the separation of aircraft.

2 Air navigation service providers shall ensure that systems referred to in points (b), (c) and (d) of Article 2(1) are deployed as necessary to support the minimum requirements for the separation of aircraft applied in accordance with paragraph 1.

3 Air navigation service providers shall ensure that the output of the surveillance chain referred to in Article 2(1) complies with the performance requirements set out in Annex I provided that the airborne constituent functions used are compliant with the requirements set out in Annex II.

F²4

Textual Amendments

F2 Deleted by Commission Implementing Regulation (EU) 2020/587 of 29 April 2020 amending Implementing Regulation (EU) No 1206/2011 laying down requirements on aircraft identification for surveillance for the single European sky and Implementing Regulation (EU) No 1207/2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (Text with EEA relevance).

Article 5

Interoperability requirements

1 Air navigation service providers shall ensure that all surveillance data transferred from their systems identified in points (b) and (c) of Article 2(1) to other navigation service providers complies with the requirements set out in Annex III.

2 Air navigation service providers when transferring surveillance data from their systems identified in points (b) and (c) of Article 2(1) to other air navigation service providers,