


Irish Aviation Authority The Times Building 11–12 D'Olier Street Dublin 2, Ireland www.iaa.ie	Údarás Eitlíochta na hÉireann Foirgneamh na hAmanna 11–12 Sráid D'Olier Baile Átha Cliath 2, Éire	AERONAUTICAL NOTICE	
Safety Regulation Division	Rannán na Rialachán Sábháilteachta	No. S.24 ISSUE 4 DATE 13.05.20	

Recent Legislative Change:

EU Regulation 1206 of 2011 (Aircraft Identification for Surveillance) as amended by EU Regulation No. 2020/587

EU Regulation 1207 of 2011 (Surveillance Performance and Interoperability) as amended by EU Regulation No. 2020/587

1. Purpose

This Aeronautical Notice was initially published to advise Air Navigation Service Providers (ANSPs) of the entry into force of Commission Regulations (EU) No 1206/2011 and 1207/2011 dated 22nd November 2011. It has subsequently been updated to reflect the publication of Commission Implementing Regulation (EU) 2020/587 which amends both of the above Regulations and enters into force on 20th May 2020.

EU Regulation 1206/2011 lays down requirements on aircraft identification for surveillance (ACID IR). This regulation has subsequently been amended by EU Regulation 2020/587.

EU Regulation 1207/2011 lays down requirements for the performance and the interoperability of surveillance (SPI IR). This regulation has subsequently been amended by EU Regulation No 1028/2014, EU Regulation No 2017/386, and EU Regulation 2020/587.

This notice highlights the regulatory provisions of particular significance to ANSPs. It is recommended that ANSPs review these regulations and take appropriate measures to ensure compliance. Particular attention should be afforded to the applicability dates for those provisions applicable to ANSPs.

2. Background

The above interoperability implementing rules were developed by Eurocontrol under a mandate from the European Commission. Both regulations provide a legal basis for the progressive evolution of the end-to-end surveillance chain.

The ACID IR was developed as part of the strategy to overcome SSR Mode A code shortages, as experienced in European airspace during peak periods. The regulation aims to provide the legal basis for a framework to provide unambiguous and continuous aircraft identification within European airspace.

The SPI IR establishes performance requirements for the end-to-end surveillance chain. It includes provisions specifying aircraft equipage requirements for Mode S transponders for specific categories of aircraft. It also establishes spectrum protection requirements in relation to the use of ground-based surveillance interrogators.

3. Regulatory Changes Overview: EU 1206/2011 (Aircraft Identification IR) as amended by Regulation (EU) 2020/587

EU Regulation 1206/2011 mandates a key milestone of 9 February 2012 for an ‘Initial Operating Capability’ which will employ a mixed environment as follows (refer to Article 4):

- Airspace for a core, contiguous area of neighbouring States (defined in EU 1206/2011 Annex I) within which the 'Downlinked Aircraft Identification Feature' is used as the primary means of ensuring individual aircraft identification.
- The remaining States shall implement interoperability with CCAMS (Centralised SSR Code Assignment and Management System) or E-ORCAM capabilities for discrete SSR code assignment and management. The IAA ANSP implemented CCAMS in Shannon and Dublin in May 2012.

By 2nd January 2020 all ANSPs must have the capability to allow them to “*establish individual aircraft identification using the downlinked aircraft identification feature*” {EU 1206/2011 Art 4 (2)}.

Requirements applicable to ANSPs include Article 4 (Performance requirements), Article 7 (verification of systems) and Article 8 which addresses additional requirements including personnel training, operations manuals and working methods and operating procedures.

Regulation (EU) 2020/587, amends point 3 of Annex II (Performance requirements) with the inclusion of an additional sub-point (d) as follows:

- ‘3. The conspicuity code shall not be assigned to aircraft referred to in point (2) if any of the following conditions apply:
...
(d) State aircraft engaged on nationally sensitive operations or training, that require security and confidentiality.’.

4. Regulatory Changes Overview: EU 1207/2011 (Surveillance Performance IR) as amended by Regulation (EU) 2020/587

Amending Regulation (EU) 2020/587 includes several updates to Regulation (EU) 1207/2011 which are summarised as follows:

Interoperability Requirements (Article 5):

The common applicability date for aircraft transponder capability is further extended to **7th December 2020**, due to the COVID-19 crisis. Additionally, a transition period for certain aircraft and exceptions under certain conditions has been introduced. Summary as follows:

Mandatory Capability	Aircraft	Applicability date
Mode S ELS	All GAT IFR	7 th December 2020

Mandatory Capability	Aircraft	Applicability date
ADS-B & Mode S EHS (General)	Aircraft with certificate of airworthiness \geq 7 th June 1995 (All GAT IFR with MTOW > 5.700Kg or TAS max > 250 knots)	7 th December 2020 The date to forward-fit (i.e. aircraft delivered after this date must meet mandatory capability).
ADS-B & Mode S EHS (Transition period to retrofit)	Aircraft with certificate of airworthiness between 7 th June 1995 and 7 th December 2020; <u>and</u> Retrofit program established by 7 th December 2020; <u>and</u> No EU funds received to retrofit.	7 th June 2023
ADS-B & Mode S EHS Exceptions	Aircraft with certificate of airworthiness before 7 th June 1995; <u>or</u> Aircraft that will cease operations by 31 st October 2025; <u>or</u> Aircraft being flown for export outside EU or to undergo maintenance	N/A

Additionally, for instances where aircraft equipped with Mode S EHS & ADS-B capable transponders are temporarily inoperative, operators are entitled to operate that aircraft in the Single European Sky airspace for a maximum of 3 consecutive days.

State Aircraft (Article 8):

For instances where State aircraft equipped with Mode S ELS/EHS & ADS-B capable transponders are temporarily inoperative, Member States are entitled to allow operation of that aircraft in the Single European Sky airspace for a maximum of 3 consecutive days.

Flight Plans (Article 14a):

This is a new requirement. Operators of aircraft not equipped in accordance with Article 5(5) and Operators of State aircraft not equipped in accordance with Article 8(3)), operating within the Single European Sky airspace, shall include indicators SUR/EUADSBX or SUR/EUEHSX or SUR/EUELSX or a combination thereof, in Item 18 of the flight plan.

Annex II amendment:

Secondary surveillance transponder capability requirements are amended as follows –

PART A (ELS) / PART B (ADS-B) amended as follows (changes in bold):

- Point 1 – ‘*The minimum capability for the secondary surveillance transponder shall be Mode S Level 2 **meeting the performance and functionality criteria** of Annex 10 to the Chicago Convention, Volume IV, Third Edition including all amendments up to No 77.*’;
- Point 5 – ‘*5. The data items referred to in point 4 shall only be transmitted by the transponder via the Mode S protocol. **The aircraft and equipment certification process shall cover the transmission of those data items.***’
- Point 6 – Deleted. Transponder continuity requirement removed.

PART C (EHS) amended as follows (changes in bold):

- Point 2 – ‘*2. The following data items, **where available on a digital bus**, shall be transmitted by the transponder as requested by the ground-based surveillance chain, via the Mode S protocol and in accordance with the formats specified in ICAO document 9871 (2nd edition):*’
- Point 4 – ‘*4. The data items referred to in point 3 shall only be transmitted by the transponder via the Mode S protocol. **The aircraft and equipment certification process shall cover the transmission of these data items.***’

Annex IV amendment:

The minimum requirements to be included in the formal arrangements between ANSPs for the exchange of surveillance data has been amended as follows:

- Item (f) – Deleted – Communication means to exchange SUR data;
- Item (h) – Deleted – Quality requirements for SUR data;
- Item (i) – Modified – Agreed Service levels now limited to:
 - surveillance data performance as established by Art.4(3);
 - procedures in case of unserviceability.

Summary of remaining amendments:

The following table provides a summary of the remaining amendments to Regulation (EU) 1207/2011, as introduced in amending Regulation (EU) 2020/587:

Art.2 (2)	Applicability: Previous reference to ‘airspace provided for in Art 1(3) of 551/2004’ changed to ‘Single European Sky airspace’
Art.4 (4)	Deleted. Responsibility on ANSP to report identified avionic anomaly to operator removed
Art.5 (6)	Operators - Antenna diversity min performance reference change: ICAO Annex 10 Amendment No 85 -> 77
Art.5 (7)	Deleted. Reference to optional local ADS-B mandates removed.
Art.6 (2)	Deleted. Removal of reference to ICAO Annex 10; Volume IV specific maximum transponder reply rates.
Art.7 (2)	Deleted. Removal of Operator requirement to perform ELS/EHS/ADS-B data item check every 2yrs.

Art.7 (3)	Member State - 24-bit address assignments reference change: ICAO Annex 10 Amendment No 85 -> 90
Art.8(1)(2)	Member State - State aircraft ELS & fixed-wing transport type ELS/EHS/ADS-B capability by 7 December 2020
Art.14	Deleted – Art.14(1) - EHS (and ADS-B) specific data item exemptions – Exemption condition moved to Annex II part C; Art.14(2) - Antenna Diversity exemption for aircraft >5.7t/250kts CoA before 1990; Art.14(3-5) – Requirement on Member State to report exemptions to Commission – removed.

5. Further Information

Further information on this Regulation is available from the following sources:

Commission Implementing Regulations (EU) 1207/2011, 1028/2014 and 2017/386 are available from the EU Eur-Lex site:

1207/2011: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02011R1207-20170327>

1028/2014: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1028&from=EN>

2017/386: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32017R0386>

2020/587: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2020.138.01.0001.01.ENG

Requests for further information should be addressed to: ansdinfo@iaa.ie

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