European Union Aviation Safety Agency

Airspace requirements – SPI (Surveillance performance and interoperability)

Where do I find a copy of the Commission Regulation (EU) No 1207/2011 laying down requirements for the performance and the interoperability of surveillance for the Single European Sky (SES) which is known as the SPI IR?

Answer

A copy of the regulation and its amendments can be found on the EASA website on the 'Regulations' page under:

- ATM/ANS interoperability - Air Traffic Management/Air Navigation Services

The latest consolidated copy of the SPI IR can be found on EUR-Lex:

- Commission Implementing Regulation (EU) No 1207/2011

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119355

Are there any acceptable means of compliance (AMC) and guidance material (GM) to the SPI IR?

Answer

AMC and GM to the SPI IR can be found on EASA website on the 'Regulations' page under ATM/ANS interoperability - Air Traffic Management/Air Navigation Services.

Link to the AMC/GM to the SPI IR:

- AMC and GM to Commission Implementing Regulation (EU) No 1207/2011 - Issue 1

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119356

What is the scope of the SPI IR with regards to airspace users?

Answer

The SPI IR is applicable to all operators, operating as general air traffic (GAT) under instrument flight rules (IFR), that are conducting flights in the Single European Sky (SES) airspace.

It is also applicable to all other operators, operating as GAT in the SES airspace, whose aircraft are equipped with Mode S transponders.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119357

What is the deadline to equip my aircraft with a Mode S transponder?

Answer

Operators operating as general air traffic under instrument flight rules are required to equip their aircraft with Mode S transponders, in accordance with the SPI IR requirements by the following deadlines:

Aircraft with a first CofA issued **prior to 7 June 1995**:

- Aircraft with a first CofA issued prior to 7 June 1995, have to be:
  - ELS capable prior to 7 December 2020

Aircraft with a first CofA issued **on or after 7 June 1995**:

- Aircraft with a MTOM of 5700 kg or less **and** with a maximum cruising TAS 250 kts or less have to be:
  - ELS capable prior to 7 December 2020
- Rotorcraft (e.g. helicopters) with a MTOM exceeding 5700 kg **or** with a maximum cruising TAS greater than 250 kts have to be:
  - ELS capable prior to 7 December 2020,
    and
  - ADS-B out capable prior to 7 December 2020 or 7 June 2023 (where there is a retrofit programme in place prior to 7 December 2020)
- Fixed wing aircraft (aeroplanes) with a MTOM exceeding 5700 kg **or** with a maximum

cruising TAS greater than 250 kts have to be :

- ELS capable prior to 7 December 2020,
  and
- ADS-B out capable prior to 7 December 2020 **or** 7 June 2023 (where there is a retrofit programme in place prior to 7 December 2020)
  and
- EHS capable prior to 7 December 2020 **or** 7 June 2023 (where there is a retrofit programme in place prior to 7 December 2020)

CofA means certificate of airworthiness.
ELS means Mode S elementary surveillance capability.
EHS means Mode S enhanced surveillance capability.
MTOM means maximum certified take-off mass.
TAS means true air speed.

Further information can be found in the AMC and GM to the SPI IR.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119358

Does the SPI IR mandate only ADS-B out capability?

Answer

The SPI IR does not only mandate ADS-B out capability, but also requires Mode S elementary surveillance (‘ELS’) equipage, and depending on the aircraft characteristics ‘Mode S enhanced surveillance (‘EHS’) equipage. (see previous question on implementation deadlines)

The equipage requirements as defined in Article 5(5) (a), (b) and (c) provide a progressively more demanding installation requirements depending upon aircraft characteristics. Details of these requirements can be found in Annex II Part A, Part B and Part C of the SPI IR.

For further information, please consult AMC2 of Article 5.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119359

Is the SPI IR equipage requirements mandatory only for EU operators?

Answer

The SPI IR is an airspace requirement that is applicable to all GAT operations undertaken by EU and Non EU operators, within the Single European Sky (SES) airspace, **regardless of the State of operator.**

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119360

How do I demonstrate my aircraft is in compliance with the SPI IR?

Answer

The aircraft capability is to be compliant with the requirements defined in points (5) (a), (b) and (c) of Article 5 and in particular in Part A, Part B and Part C of Annex II.

AMC2 of Article 5 on 'Interoperability requirements' contains further information on how to comply with these requirements.

Evidence of compliance can normally be found in the Aircraft Flight Manual (AFM) or as a Flight Manual Supplement.

If there is no relevant statement in the AFM, operators should contact with the type certificate holders (TCHs) or the supplemental type certificate holders (STCHs).

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119361

Does the SPI IR allow operators to postpone implementation?

Answer

The SPI IR permits a deferral of the compliance deadline, through transitional arrangements, to 7 June 2023, for aircraft with a first Certificate of Airworthiness issued prior to 7 December 2020 for the installation of ADS-B out or ADS-B out and Mode S Enhanced Surveillance (EHS) only.

These transitional arrangement are:

1. a retrofit programme is established prior to 7 December 2020 , that demonstrates compliance with the ADS-B out or ADS-B out and EHS requirements;
2. aircraft operators have not benefitted from any Union funding granted to bring such aircraft in compliance with the ADS-B out or EHS and ADS-B out requirements.

For further information, please consult AMC3 of Article 5.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119362

Does the SPI IR allow for any exemptions from the mandatory equipage requirements?

Answer

There are no exemptions possibilities provided for in the SPI IR.

Although some stakeholders would refer to them as equipage ‘exemptions’, Article 5(5) provides some relief from compliance with the ADS-B out and with ADS-B out and EHS (for fixed wing aircraft) requirements for aircraft with a maximum certified take-off mass exceeding 5700 kg or with a max cruising true air speed greater than 250 kts, when the aircraft meets at least one of the following conditions:

- aircraft received their first CofA prior to 7 June 1995,
- aircraft are flown to undergo maintenance,
- aircraft are flown for export,
- aircraft operation ceases in the Single European Sky by 31 October 2025.

It should be noted that for all the above cases, compliance with Mode S ELS equipage is required, in accordance with Article 5(5) (a).

Further details are provided in the GM4 Article 5 Interoperability requirements.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119363

Do I need to submit my retrofit programme to EASA or my competent

authority for approval?

Answer

SPI IR **does not require** operators to submit their retrofit programmes to EASA or their competent authority for approval, in order to benefit from a deferred compliance in accordance with the conditions specified in Article 5(5).

For further details, please see AMC 3 Article 5 on transitional arrangements.

However, operators should have the retrofit programme and required evidence in place prior to 7 December 2020 and make it available upon request to their competent authority.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119364

Do I need to notify EASA that my aircraft benefits from retrofit programme implementation deferral or is 'exempt'?

Answer

SPI IR does not require operators to notify EASA, or any other entity, that their aircraft benefit from the transitional arrangements (retrofit programme).

Also notification is not required in the cases where the certain equipage requirements of the SPI IR are not applicable (e.g. aircraft flown to undergo maintenance, for export or when operation ceases in the Single European Sky by 31 October 2025).

Nonetheless, the appropriate equipage and operational status, including the correct designator for the functioning surveillance systems, should be indicated in the flight plan.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119365

How should I reflect in the flight plan the status of my aircraft that are benefiting from the transitional arrangements?

Answer

The appropriate equipage and operational status, including the correct designator for the functioning surveillance systems, should be inserted in items 10b and 18 of the flight plan accordingly.

Operators of aircraft, which are not equipped with Mode S EHS and/or ADS-B out, making use of the retrofit programme deferral provision, should insert the designators SUR/EUADSBX or SUR/EUEHSX or a combination thereof, in Item 18 of the flight plan.

For information on the correct designators to be used for the functioning surveillance systems, to be indicated in item 10b of the flight plan, please refer to Commission Regulation (EC) No 1033/2006.

For further information, please check AMC1 Article 14a Flight Plans.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119366

If I have a transponder function, which is temporarily inoperative, may I continue to operate?

Answer

Article 5(5) of the SPI IR defines the conditions to allow limited operations in Single European Sky airspace, where the required capability is temporary inoperative.

The specific relief **of 3 consecutive days** is only applicable for the ADS-B out or ADS-B out and Mode S EHS capability being inoperative. No relief is provided for inoperative Mode S ELS systems. Operations are to be within these limits and under the conditions specific in the operators MEL (Minimum Equipment List).

The flight plan shall reflect that the aircraft is not compliant during this temporary inoperative period by inserting SUR/EUADSBX or SUR/EUEHSX or a combination of thereof, as necessary, in Item 18 of the flight plan. The remaining functioning surveillance capability should be indicated in the flight plan field 10b as appropriate.

For further information, please see AMC1 Article 14a Flight Plans.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119367

Is there any more information on MEL for the SPI IR?

Answer

Conditions for operations in the Single European Sky airspace with temporarily inoperative transponder function can be found in Article 5(5) of the SPI IR. Such conditions could be potentially supplemented by conditions for operation and rectification interval as required by the operators' Competent Authority (CA). We recommend you initially contact your CA. It should also be noted that the MEL is based on the Master Minimum Equipment LIST (MMEL) specific for the aircraft/model and cannot be less restrictive.

You can find specific information regarding the MMEL for your aircraft type/model from the aircraft Type Certificate Holder (TCH).

If your surveillance equipment (transponder) has been installed using a Supplemental Type Certificate (STC), you should contact the STC holder (STCH) to obtain the relevant information and documentation.

With regards to EASA documentation, CS-MMEL Issue 2 (Certification Specifications and guidance material for Master Minimum Equipment List), includes the references to the changes introduced by the amendment to the SPI IR.

For any further information on MMEL please send your request to mmel [at] easa.europa.eu.

Last updated:
02/11/2020

Link:
https://www.easa.europa.eu/en/faq/119368

Who should I ask if I have further questions on the SPI IR?

Answer

For any further information on the SPI IR, please send your query to atm [at] easa.europa.eu.

Last updated:
02/11/2020

Link:

https://www.easa.europa.eu/en/faq/119369