Postponement of the requirements for locating an aircraft in distress

RMT.0392

EXECUTIVE SUMMARY

The objective of this Notice of Proposed Amendment (NPA) is to ensure a smooth implementation of means to locate large aeroplanes when they are in distress.

NPA 2022-104 proposes to amend the applicability dates of point CAT.GEN.MPA.210 ‘Location of an aircraft in distress — Aeroplanes’ of Annex IV (Part-CAT) to Regulation (EU) No 965/2012 ('Air OPS Regulation'), following the postponement of the applicability dates of the related Standards and Recommended Practices (SARPs) in International Civil Aviation Organization (ICAO) Annex 6, Part I.

The proposed amendment is expected to reduce regulatory burden and to incorporate related ICAO SARPs.

Domain: Commercial air transport (CAT) operations
Related rules: Part-CAT of the Air OPS Regulation
Affected stakeholders: Aircraft operators; aircraft manufacturers; national competent authorities (NCAs)
Driver: Efficiency/proportionality
Impact assessment: Yes (light)
Rulemaking group: No

EASA rulemaking procedure milestones

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<td>7.10.2020</td>
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1. **About this NPA**

1.1. **How this NPA was developed**

The European Union Aviation Safety Agency (EASA) developed this NPA in line with Regulation (EU) 2018/1139¹ (‘Basic Regulation’) and the Rulemaking Procedure².

This Rulemaking Task (RMT).0392 is included in Volume II of the European Plan for Aviation Safety (EPAS) 2022-2026. The scope and timescales of the task are defined in the related Terms of Reference (ToR)³. Although not explicitly included in the scope of one of the specific subtasks that are described in the ToR, this RMT falls within the wider scope of this a regular-update RMT to address minor, non-controversial, non-complex, and mature issues in Regulation (EU) No 965/2012 (‘Air OPS Regulation’)⁴.

On 7 July 2022, EASA informed the EASA Advisory Bodies (ABs) in writing of its intent to prepare a proposal to postpone the applicability dates of point CAT.GEN.MPA.210 ‘Location of an aircraft in distress — Aeroplanes’ of Annex IV (Part-CAT) to the Air OPS Regulation, following the new applicability dates adopted for Standard 6.18.1 of International Civil Aviation Organization (ICAO) Annex 6, Part I. Germany, Netherlands, France, Spain, Italy, and Ireland were in agreement on this EASA plan. There were no disagreements, nor any significant comments were received from stakeholders.

The text of this NPA has been developed by EASA. It will be consulted with the EASA ABs in accordance with Article 6(2) of MB Decision No 01-2022.

1.2. **How to comment on this NPA**

Please submit your comments via email to air_ops@easa.europa.eu. The deadline for submission of comments is 24 August 2022.

1.3. **The next steps**

Following the AB consultation, EASA will review all the comments received.

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² EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the ‘Rulemaking Procedure’. See MB Decision No 01-2022 of 2 May 2022 on the procedure to be applied by EASA for the issuing of opinions, certification specifications and other detailed specifications, acceptable means of compliance and guidance material (‘Rulemaking Procedure’), and repealing Management Board Decision No 18-2015 (https://www.easa.europa.eu/the-agency/management-board/decisions/easa-mb-decision-no-01-2022-rulemaking-procedure-repealing-mb).


Based on the comments received, EASA will revise, if necessary, the proposed amendment to the Air OPS Regulation and issue an opinion. A summary of the comments received will be provided in the explanatory note to the opinion.

The opinion will be submitted to the European Commission, which will decide whether to amend the Air OPS Regulation based on the opinion.
2. In summary — why and what

2.1. Why we need to amend the rules — issue/rationale

Current requirements

Standard 6.18.1 of International Civil Aviation Organization (ICAO) Annex 6, Part I, Chapter 6 (hereinafter ‘ICAO Standard 6.18.1’) requires that all aeroplanes of a maximum certified take-off mass (MCTOM) of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2023 shall autonomously transmit information based on which a position can be determined by the operator at least once every minute, when in distress. More detailed requirements are contained in Appendix 9 to ICAO Annex 6, Part I.

The objective of ICAO Standard 6.18.1 is to determine the location of an accident site wherever it occurs, and to assist search-and-rescue (SAR) authorities and safety investigation authorities in their respective missions.

ICAO Standard 6.18.1 was incorporated into point CAT.GEN.MPA.210 of Annex IV (Part-CAT) to Regulation (EU) No 965/2012 (‘Air OPS Regulation’), which requires the following:

‘The following aeroplanes shall be equipped with robust and automatic means to accurately determine, following an accident during which the aeroplane is severely damaged, the location of the point of end of flight:

(a) all aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19 and first issued with an individual CofA on or after 1 January 2023; and

(b) all aeroplanes with an MCTOM of more than 45 500 kg and first issued with an individual CofA on or after 1 January 2023.’

In practice, all aircraft manufacturers concerned elected to install an emergency locator transmitter of a distress tracking type (ELT(DT))7, ensuring compliance with both point CAT.GEN.MPA.210 and ICAO Standard 6.18.1.

Implementation issues faced by industry

In March 2022, the International Coordination Council of Aerospace Industry Associations (ICCAIA), on behalf of all aircraft manufacturers concerned, requested that ICAO postpones the applicability of its Standard 6.18.1. At the same time, Airbus requested EASA to postpone the applicability of point CAT.GEN.MPA.210.

To fully assess the situation, EASA asked for additional information from ICCAIA, Airbus, as well as the Secretariat of the International COSPAS-SARSAT Programme, through letters sent in April 2022. In addition, EASA discussed this issue with EASA Member States (MSs) and industry at meetings of its

5 Please refer to the first note of Appendix 9 to ICAO Annex 6, Part I.
6 Certificate of airworthiness.
7 An ELT(DT) is a specific type of ELT that is designed to be activated upon automatic detection of conditions indicative of a distress situation. Usually, an automatic triggering function monitors aircraft parameters throughout the flight and automatically triggers the ELT(DT) when it detects certain conditions. The flight crew can also manually activate the ELT(DT) in case of a distress situation.
ABs, namely the Air Operations Technical Body (Air OPS TeB) and the Certification Committee (C.COM). EASA also had several coordination meetings with the ICAO Secretariat on the issue.

The intelligence gathered through those meetings and discussions revealed that aircraft manufacturers are facing significant delays in certification due to the time needed to fit the aeroplanes concerned with the necessary equipment.

The COVID-19 pandemic affected the planned delivery in 2022 of 700 to 1000 aeroplanes with an MCTOM of more than 27 000 kg, which had been designed and manufactured without the equipment needed to comply with point CAT.GEN.MPA.210 and ICAO Standard 6.18.1. Those aircraft which have been in long-term storage until their planned operators take delivery of them, will now be delivered after 1 January 2023. Among those aircraft, dozens are destined for EU operators.

The detailed acceptable means of compliance (AMC) to point CAT.GEN.MPA.210, which were adopted by EASA in its Executive Director (ED) Decision 2021/008/R (issued in May 2021) and went further than specified in Appendix 9 to ICAO Annex 6, Part I, contributed to those delays. More precisely, the conditions adopted by EASA in the related AMC contain performance objectives\(^8\) to ensure that the level of service to SAR points of contact of States will not be lower than that provided today by an automatic emergency locator transmitter (ELT)\(^9\). Aircraft manufacturers aim at fitting their aircraft with equipment that meets both the conditions in Appendix 9 to ICAO Annex 6, Part I, and the ones adopted by EASA, so that those aircraft can be operated in the European Union and worldwide without modifications or restrictions. However, this also means a significantly higher amount of work needed to design and certify that equipment.

Furthermore, the International COSPAS/SARSAT Programme has been facing significant delays in setting up the communication infrastructure that is necessary to process and transmit ELT(DT) signals to the SAR points of contact of States. More specifically, the full operational capability (FOC) for the middle-Earth orbit search-and-rescue (MEOSAR) component of the International COSPAS/SARSAT Programme has not been yet declared for any type of ELT(DT). The MEOSAR component is essential for meeting the objectives of worldwide coverage and quick transmission of ELT(DT) signals. Until that FOC is declared, ELT(DT) models cannot obtain an operational approval by the International COSPAS/SARSAT Programme, and as a result, ELT(DT) messages cannot be transmitted by this programme. This means that until that FOC is declared, aircraft equipped with an ELT(DT) cannot ensure compliance with point CAT.GEN.MPA.210 (and indirectly with ICAO Standard 6.18.1).

Finally, even when the communication infrastructure will be ready to transmit ELT(DT) messages, time will be needed by rescue coordination centres (RCCs) to adapt their procedures for handling information that stems from an active ELT(DT). This is because, unlike other types of ELT, an ELT(DT) is designed to transmit in flight, before a crash impact or an emergency landing. Several months may be needed to get RCCs fully ready to manage messages from an ELT(DT).

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\(^8\) The conditions applicable to airborne equipment are contained in Subpart E, Section 3 of the Certification Specifications for Airborne Communications, Navigation and Surveillance (CS-ACNS).

\(^9\) According to point CAT.IDE.A.280 of Part-CAT, an automatic ELT must be installed on every aeroplane operated for CAT and with an MOPSC of more than 19. According to that point, the automatic ELT may be replaced by another means that meets the requirements of point CAT.GEN.MPA.210.
ICAO response to the issue

The issue was discussed by the ICAO Air Navigation Commission, which proposed the following amendment to ICAO Standard 6.18.1:

‘6.18.1 As of 1 January 2025, all aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2024, shall autonomously transmit information from which a position can be determined by the operator at least once every minute, when in distress, in accordance with Appendix 9.’

The ICAO Council adopted this amendment during the 16th Meeting of its 226th Session on 18 July 2022, with the agreement of the EU MSs.

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. The proposed amendment will contribute to achieving the overall objectives by addressing the issue described in Section 2.1.

The specific objectives of this proposed amendment are to ensure the effective implementation of point CAT.GEN.MPA.210, while maintaining the cost for, as well as the human resources involved in, that implementation commensurate with the expected safety benefit.

2.3. How we want to achieve it — overview of the proposed amendments

This NPA proposes to amend point CAT.GEN.MPA.210 to align its applicability dates with the new applicability dates adopted for ICAO Standard 6.18.1, as follows:

As of 1 January 2025, the following aeroplanes shall be equipped with robust and automatic means to accurately determine, following an accident during which the aeroplane is severely damaged, the location of the point of end of flight:

(1a) all aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19, and first issued with an individual CofA on or after 1 January 2023;

(1b) all aeroplanes with an MCTOM of more than 45 500 kg and first issued with an individual CofA on or after 1 January 2023.

2.4. What are the expected benefits and drawbacks of the proposed amendment

ICAO-assessed impacts of the amendment of ICAO Standard 6.18.1

When considering amending the applicability date of ICAO Standard 6.18.1, ICAO looked at three main options, and evaluated their impacts, as summarised in the table below:

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10 The effective date of the amendment is 24 October 2022, its applicability date is 1 December 2022.

In summary — why and what

<table>
<thead>
<tr>
<th>(Relative to the 1 January 2023 baseline date)</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Do nothing</td>
<td>Extend the equipage installation deadline from 1 January 2023 to 1 January 2024, with 1 January 2025 as applicability date, i.e. one year after the equipage installation deadline</td>
<td>Extend the equipage installation deadline from 1 January 2023 to 1 January 2025</td>
</tr>
<tr>
<td>Number of aircraft with an autonomous distress tracking (ADT) system installed</td>
<td>Significant increase</td>
<td>Minimal change*</td>
<td>Possible decrease</td>
</tr>
<tr>
<td>Cost to industry</td>
<td>Significant increase</td>
<td>No or small increase</td>
<td>None</td>
</tr>
<tr>
<td>Impact on reputation/passenger perception</td>
<td>No change</td>
<td>Some negative</td>
<td>Negative</td>
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*The exact number of aeroplanes equipped with an ADT system may vary depending on the specific circumstances related to the delivery of aeroplanes and certification of the ADT system.

ICAO considered that Option 1, which represents the existing situation, was no longer possible given the certification delays and the lack of viable options for managing this without a change to the Standard.

Option 3 was rejected since it could potentially reduce the number of aircraft that would ultimately be equipped with an ADT system below the 2023 baseline figures, which was not considered acceptable.

Option 2 was found to be the best one as it would keep the number of ADT-system-equipped aircraft largely at the 2023 baseline figures, while still providing industry with the two-year deadline extension it requested. Option 2 proposed an embedded applicability date (1 January 2025), one year after the equipage deadline (1 January 2024). This provides an additional one-year buffer to States and industry to complete certification and validation for all affected aircraft.

In terms of implementation issues, ICAO identified that the change in the Standard could require States that have already incorporated it in their regulations to update them. As for industry, there should be no issues with managing the change, since it will allow more time to prepare for the arrival of aircraft equipped with an ADT system and ensure their processes are in place.

In terms of cost, ICAO identified that the primary economic impact of the change would be to relieve industry from a significant additional expense, estimated (based on information received from the International Air Transport Association (IATA) and ICCAIA) at USD 175 to 262 million (EUR 172 to 257 million). This would provide some relief to an industry already severely hit by the impact of the COVID-19 pandemic.
EASA-assessed impacts

In general terms, EASA agrees with the impact assessment conducted by ICAO and finds that it is relevant for the European fleet. However, EASA complemented the above ICAO assessment with the following one:

Impact of not harmonising the applicability date of point CAT.GEN.MPA.210 with the amendment to ICAO Standard 6.18.1

Maintaining the applicability date of 1 January 2023 in point CAT.GEN.MPA.210 would probably lead many EU aircraft operators to request temporary exemptions for aeroplanes delivered in 2023 and to perform very expensive equipment retrofit (estimated at about EUR 100 000 to several million per individual aeroplane)\textsuperscript{12}.

In addition, such temporary exemptions might have to be extended to 2024 to grant sufficient time for retrofiting all aeroplanes concerned. The management of these many exemptions would create a significant administrative burden for competent authorities of EASA MSs.

The economic burden generated by not amending point CAT.GEN.MPA.210 would have to be borne only by EU operators, as according to Commission Regulation (EU) 452/2014\textsuperscript{13}, third-country operators operating within, into or out of the European Union would only need to comply with the relevant ICAO SARPs. Hence, maintaining the applicability date of 1 January 2023 in point CAT.GEN.MPA.210 would result in a competitive disadvantage for EU operators.

Impacts of the proposed amendment to point CAT.GEN.MPA.120

Impact on safety

The safety impact of the proposed amendment to point CAT.GEN.MPA.210 is expected to be slightly negative, because it will result in taking aeroplanes first issued with an individual CoFA in 2023 out of the scope of point CAT.GEN.MPA.210, and in delaying the applicability of that point to 1 January 2025. However, EASA considered the following points:

— Point CAT.GEN.MPA.210 will anyway bring significant benefits for only a small proportion of accidents with large aeroplanes as, in most cases, such accidents take place at or in the vicinity of an airfield and the accident site can be easily located thanks to witnesses and/or radar data. Accidents with large aeroplanes over oceanic or remote areas are rare.

— All aeroplanes excluded from the scope of point CAT.GEN.MPA.210 by the proposed amendment must be covered by the aircraft tracking system of the operator (according to point CAT.GEN.MPA.205), and they must carry two ELTs, one of which being an automatic ELT (according to point CAT.IDE.A.280). Therefore, if one of those aeroplanes has an accident over an oceanic or remote area, information on the location of the accident could be obtained from the aircraft tracking system of the operator or from the ELTs or from both. However, the aircraft

\textsuperscript{12} The lower end of this cost range corresponds to the case of an aircraft for which all the necessary provisions for installing the ELT(DT) are made on the aircraft during its manufacture. In the less favourable case, where provisions for ELT(DT) installation have not been made before the aircraft leaves the factory, the cost may be much higher.


An agency of the European Union

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tracking system and the ELTs installed on currently operated aeroplanes cannot be considered acceptable alternatives to implementing point CAT.GEN.MPA.210, since the information they provide is less reliable, less accurate, and less timely than the information provided by means compliant with point CAT.GEN.MPA.210. Nevertheless, the fact that aeroplanes excluded from the scope of point CAT.GEN.MPA.210 are already equipped with some locating capabilities is relevant for assessing the impact of the proposed postponement.

― The negative safety effect of postponing the applicability to 1 January 2025 is temporary. It will disappear once this date is passed.

**Economic impact**

The proposed amendment significantly reduces the number of aeroplanes that would have to be retrofitted under the current requirements. Therefore, the economic impact on industry is moderately positive.

With the proposed amendment, no temporary exemptions will be needed for allowing the operation of aeroplanes initially planned to be delivered in 2022 and finally delivered in 2023. A much smaller number of aeroplanes that fall within the scope of point CAT.GEN.MPA.210 are expected to be delivered in 2024 without the necessary equipment to comply with that point, and those aeroplanes could be retrofitted with the required equipment until 31 December 2024 without requiring a temporary exemption. In addition, no temporary exemptions will be needed to address the delayed operational approval of the ELT(DT), which is caused by the delay in declaring the FOC of the MEOSAR component of the International COSPAS-SARSAT Programme. Therefore, the proposed amendment reduces the administrative burden for competent authorities, making its economic impact on EASA MSs moderately positive.

**Impact on proportionality**

The aeroplanes that fall within the scope of point CAT.GEN.MPA.210 are operated for commercial air transport (CAT) and have an MCTOM of more than 27 000 kg; therefore, the proposed amendment has no impact on General Aviation (GA).

**Social and environmental impact**

EASA is not aware of any social or environmental impacts that could result from the proposed amendment.
3. How we monitor and evaluate the proposed amendments

No specific monitoring or evaluation of the proposed amendments is planned apart from the already ongoing standardisation activities and exchanges between EASA and relevant stakeholders, through which any emerging issues could be identified.
4. References

4.1. Related EU regulations

4.2. Related EASA decisions
N/a

4.3. Other references
— Proposal for a COUNCIL DECISION on the position to be taken on behalf of the European Union in the 226th session of the Council of the International Civil Aviation Organization as regards the envisaged adoption of Amendment 48 to Annex 6 Part I to the Convention on International Civil Aviation (COM/2022/312 final)15, adopted on 15 July 2022

Annex to EASA Opinion No xx/2022

COMMISSION IMPLEMENTING REGULATION (EU) …/...

of XXX

on […]

Brussels, XXX

[…] (2022) XXX draft
COMMISSION IMPLEMENTING REGULATION (EU) .../...

of XXX

amending Commission Regulation (EU) No 965/2012 as regards the postponement of the requirements for locating an aircraft in distress

THE EUROPEAN COMMISSION,

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


Whereas:

(1) The ICAO Council adopted Amendment 48 to ICAO Annex 6, Part I at the 16th Meeting of their 226th Session on 18 July 2022. That amendment postpones the applicability date of ICAO Standard 6.18.1 to 1 January 2025 and restricts its applicability to aeroplanes first issued with an individual Certificate of Airworthiness (CofA) on or after 1 January 2024.

(2) ICAO Standard 6.18.1 was incorporated into point CAT.GEN.MPA.210 of Annex IV (Part-CAT) to Commission Regulation (EU) No 965/2012 2, which requires certain aeroplanes to be equipped with robust and automatic means to accurately determine, following an accident during which the aeroplane is severely damaged, the location of the point of end of flight.

(3) The postponement of the ICAO Standard intends the following:

— to address significant delays, faced by all aircraft manufacturers concerned worldwide, in fitting aeroplanes with the necessary equipment, and setting up the necessary communication infrastructure between all relevant stakeholders (including air traffic service (ATS) providers and rescue coordination centres (RCCs)); and

— to provide more time for RCCs and ATS units to prepare and adapt their procedures.

(4) Commission Regulation (EU) No 965/2012 should, therefore, be amended accordingly, to address the impact of the delays on EU operators.

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The European Union Aviation Safety Agency prepared draft implementing rules and submitted them to the European Commission with Opinion No XX/2022 in accordance with Article 76(1) of Regulation (EU) 2018/1139.

The measures provided for in this Regulation are in accordance with the opinion of the Committee that is established in accordance with Article 127 of Regulation (EU) 2018/1139.

HAS ADOPTED THIS REGULATION:

Article 1

Point CAT.GEN.MPA.210 of Annex IV (Part-CAT) to Commission Regulation (EU) No 965/2012 is replaced by the following:

‘CAT.GEN.MPA.210 Location of an aircraft in distress – Aeroplanes

As of 1 January 2025, the following aeroplanes shall be equipped with robust and automatic means to accurately determine, following an accident during which the aeroplane is severely damaged, the location of the point of end of flight:

(a) all aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19, and first issued with an individual CofA on or after 1 January 2024; and

(b) all aeroplanes with an MCTOM of more than 45 500 kg and first issued with an individual CofA on or after 1 January 2024.’

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission
The President

[...]