

Consultation: Bringing new light aircraft between 450-600kg under national regulation

CAP 1845

A large, abstract graphic composed of overlapping blue and purple shapes, resembling a stylized wing or a modern architectural element, occupies the lower half of the page.

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Executive summary

The CAA now has the option to directly regulate a category of light aircraft of a greater weight than previously allowed by EU regulation. The proposal is for the UK to consider an 'opt out' from current European regulation in favour of national regulation. The boundaries between current and proposed national regulation would be set out as follows:

Aircraft under national regulation	Current regulation	Revised regulation under the 'opt out'
Aeroplanes, Helicopters and Powered sailplanes	Up to 450kg Maximum Take-Off Mass (MTOM) ¹	Up to 600kg MTOM ²
Additional weight allowance for water operations: aeroplanes or helicopters	45kg	50kg
Additional weight allowance for an airframe mounted total recovery parachute	25kg	No provision
Sailplanes	Up to 400kg MTOM	Up to 600kg MTOM

¹ Aeroplanes: must have a measurable stalling speed or minimum steady flight speed in landing configuration of not more than 35 knots Calibrated Air Speed (CAS).

² Aeroplanes: must have a measurable stalling speed or minimum steady flight speed in landing configuration of not more than 35 knots CAS for those with an MTOM under 450kg, and 45 knots CAS for those between 450-600kg MTOM (with allowances in both cases for the additional weights indicated).

This consultation explores the merits of the UK adopting this provision and sets out the views of a working group which we brought together comprising of general aviation stakeholders.

Overall, opting out may introduce greater flexibility for certifying sub-600kg aeroplanes, helicopters and sailplanes. It removes an artificial barrier that currently exists between EU and national rules and brings them into a more direct and potentially more proportionate national oversight.

On the other hand, national certification loses the common standards and mutual recognition that aircraft certified by the European Aviation Safety Agency (EASA) enjoy. Moreover, EASA's own oversight of aircraft intended for sport and recreational use is likely to become more proportionate as a result of measures that the Agency is required to propose by September 2020.

The document summarises the key provisions within the proposed regulatory changes and explores their implications from an airworthiness, flight crew licensing and operational perspective.

This consultation closes on **Friday 29 November 2019**. Responses to the two questions set out in chapter two (whether the UK should opt out of the basic regulation; and if it did opt out, how the aircraft should be defined) should be submitted online:

- <https://consultations.caa.co.uk/ga/450-600kg-regulation>

Chapter 1

Next steps and how to respond

- 1.1 Consultation questions can be found in Appendix A.
- 1.2 Responses can be submitted electronically via <https://consultations.caa.co.uk/ga/450-600kg-regulation> by no later than **Friday 29 November 2019**.
- 1.3 Any enquiries regarding this consultation should be submitted via email to: ga@caa.co.uk.
- 1.4 We will consider all responses and aim to publish a comment response document and a decision by April 2020.
- 1.5 If the UK decides to opt-out, there will be an implementation period while we enact the necessary legislative changes. We also need to develop guidelines with the associations on the treatment of these aircraft from an airworthiness and flight crew licensing perspective. It is our intention to re-form the collaborative working group as necessary to take this endeavour to a conclusion.

Chapter 2

The proposal to opt out

Introduction

- 2.1 The new European civil aviation basic regulation¹ [hereafter 'EU basic regulation'] contains a provision allowing EU member states to voluntarily extend their national certification to a larger fleet of light aircraft². Those member states would in effect be 'opting out' of a set of specific aircraft categories from the requirement for EASA certification.
- 2.2 Other EU member states have adopted or are considering the opt-out³. Accordingly, within this consultation, we are investigating the merits of the opportunities presented in the EU basic regulation. These opportunities will be further discussed below.
- 2.3 To help us develop this consultation, we have convened a working group of key general aviation community representatives. They assisted us in reviewing this opt-out provision and the relative merits for and against adopting it⁴.

EU exit implications

- 2.4 Parliament has passed an Act that would retain the EU basic regulation as national, domestic law, with modifications to reflect the UK's departure from the EU. It will therefore remain aligned with the EU system in the future.

Light aircraft under the EU basic regulation

- 2.5 EASA currently certifies most European factory-built aircraft. The exceptions to this are certain specific categories listed in the EU basic regulation⁵, namely: historic, experimental, ex-military, smaller balloons, sub-70kg⁶ (unpowered or powered), and the following categories of light aircraft:

¹ Regulation (EU) 2018/1139 of the European Parliament and the Council on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, published in Official Journal 22 Aug 2018, entered into force 11 Sep 2018. Hereafter 'EU basic regulation'

²EU basic regulation, article 2(8).

³ For an updated list of Member States that have enacted the 'Opt-Out', see "EASA List of Art.2(8) of Regulation 2018/1139": <https://www.easa.europa.eu/opt-out-article-28-211#group-easa-downloads>

⁴ A list of these representative organisations is set out in Appendix C.

⁵ EU basic regulation (see Note 1), Annex I.

⁶ In the case of sub-70kg aircraft, the mass is unladen including fuel.

Category	Single-seater	Two-seater
Aeroplanes* Helicopters Powered parachutes Powered sailplanes	300kg Maximum Take-Off Mass (MTOM)	450kg MTOM
Additional weight allowance for amphibians/floats for aeroplanes and helicopters	30kg	45kg
Additional weight allowance for an Airframe-Mounted Total Recovery Parachute System for aeroplanes	15kg	25kg
Sailplanes	250kg MTOM	400kg MTOM

* Aeroplanes: must have a measurable stalling speed or minimum steady flight speed in landing configuration of not more than 35 knots CAS

About the opt-out provisions

2.6 At its core, the opt-out allows member states to voluntarily move the following categories of manned factory-built light aircraft from EASA regulation to national regulation:

Opted-out aircraft category	Two-seater
Aeroplanes* Helicopters Powered sailplanes	Up to 600kg MTOM
Additional weight allowance for water operations for aeroplanes or helicopters	50kg
Sailplanes	Up to 600kg MTOM

* Aeroplanes: must have a measurable stalling speed or minimum steady flight speed in landing configuration of not more than 45 knots CAS

2.7 The purpose of this provision is to help simplify the regulation of smaller aircraft by bringing them under the direct oversight of the national regulator. It only applies to new types of aircraft that do not already hold an existing certificate under the EU basic regulation (either existing or former). This means that existing EASA aircraft types remain regulated by EASA.

- 2.8 When a member state has opted-out, a manufacturer based in that member state could independently ‘opt back in’ for the purpose of obtaining an EASA type certificate⁷. The manufacturer can do this if they feel they will benefit from a greater pan-European acceptable basis of certification.

Should the UK opt out of the EU regulation?

- 2.9 The first question in this consultation paper asks whether or not the UK should adopt this provision and opt these aircraft out of the EU basic regulation.
- 2.10 We have undertaken a review of the available data on reported incidents involving potentially opted-out aircraft along with input from the working group and we have not identified any significant safety issues arising from an opt-out decision.
- 2.11 The opt-out provision is by its nature optional so that EU member states can consider the advantages and disadvantages of opting-out.
- 2.12 The advantages of opting-out are as follows:
- a) Aircraft design certification would be overseen by us and this may bring practical advantages to the process.
 - b) Opting-out eliminates the boundary in the regulation at 450kg between national and EASA requirements, thereby creating the opportunity for a more proportionate regulatory framework.
 - c) It may result in a greater range of aircraft being available to the UK market and increase the numbers of aircraft managed under the auspices of the British Microlight Aircraft Association (BMAA) and the Light Aircraft Association (LAA).
 - d) An opportunity could be created for us to extend the market to make available sub-600kg factory-built helicopters. We do not currently have an active fleet in this category, but other countries have ultra-light helicopters operating under national approvals, so opting-out may result in a lighter touch regulation in the UK and thus provide a more attractive environment for manufacturers and providers.
 - e) Other countries worldwide have already adopted a light sport aircraft category and this initiative might increase the opportunity for international trade.
- 2.13 The disadvantages are as follows:
- a) There is currently no guarantee that training or experience in the opted-out aircraft could count towards an EASA flight crew licence.

⁷ EU basic regulation (Note 1), article 2(9).

- b) EASA is obliged in the next year to issue its own proposals to simplify the regulation of aircraft intended primarily for sport and recreational use⁸. Such proposals are required to be proportionate, cost-efficient, flexible and based on existing best practices in the EU member states. However, it is not known at this time what these might be, and when any resulting changes would come into force, but we understand that the intention is that they will be introduced quickly. These future proposals would be an alternative to a national opt-out, though the UK will have ceased to be an EU member state by then.
- c) Bringing these aircraft into national certification may remove the common standards and mutual recognition benefits currently facilitated by EASA type certificates, which may in-turn hamper market opportunities around the EU. This might be mitigated by the 'opt back in' provision described above allowing manufacturers to voluntarily bring certain types back into EASA certification. However if a majority of manufacturers were to exercise such an opt back in provision, this may undermine the national decision of having opted-out.

2.14 The CAA does not currently have a preferred view over whether or not to opt-out. However, the working group stakeholders held a majority view to support the opt-out decision as they believed the advantages outweighed the disadvantages.

Defining the opted-out aircraft

2.15 The second matter for consultation is how to legally define these aircraft within UK regulation if we decided to opt-out. There are two options for this:

- a) Define the opted-out aircraft as 'microlights'. This would be done by amending the Air Navigation Order 2016 (ANO) definition of 'microlight aeroplanes' to remove the word 'aeroplanes' and then include new types of aircraft fitting the opted-out categories set out above.
- b) Define the opted-out aircraft as 'light sport aircraft'. This would be done by amending the ANO to introduce a new definition for 'light sport aircraft' to fit the opted-out categories set out above.

2.16 Both options would need to take into account the following considerations:

- a) **Airworthiness design codes.** The following two factors were identified:
 - (1) If the aircraft were defined as microlights, they would be able to make use of the existing British Civil Airworthiness Requirements (BCAR) Section S. Manufacturers would need an A8-1 Design and Manufacturing approval.
 - (2) If the aircraft were defined as light sport aircraft, the existing EASA certification standard for Light Sport Aircraft (CS-LSA) could be used. Design

⁸ EU Basic regulation (Note 1), article 140(3).

and manufacturing approval could be under BCAR A8-21 or potentially a modified A8-1. However, CS-LSA relies heavily on references to the American Society for Testing and Materials (ASTM) over which the UK has no direct control and may not provide enough detail. The alternative would be to create the CAA's own light sport aircraft code within BCAR, which while possible would require regular review to maintain consistency with the other codes and the ASTM.

- b) **Aerodrome restrictions.** Some aerodromes currently prohibit microlight operations; this is normally a planning matter rather than a regulatory one, however this could have implications for opted-out aircraft if the revised microlight definition was used.
- c) This may not be an issue if the aircraft were defined as light sport aircraft.
- d) **Noise certificates.** We have recently issued a temporary exemption to remove the noise certificate requirement for aircraft *currently defined in the ANO* as microlights⁹. The government is also planning to consult on legislative changes to make this permanent, and this may affect opted-out aircraft whatever definition is used.

2.17 The CAA does not currently have a view on the preferred definition option should we opt these aircraft out of the EU basic regulation, but the stakeholders within the working group held a majority view to support the use of an extended microlight definition in lieu of introducing a light sport aircraft category. They felt overall that this was a simpler way forward to allow a quicker implementation, should we decide to opt-out.

What does it mean for me if we define the aircraft as microlights?

2.18 The following sets out the practicalities from an airworthiness, pilot licensing and operations perspective if we were to opt-out under the EU basic regulation and define the aircraft as microlights. Should there be strong support for the creation of a light sport aircraft category, then further work would be needed to understand and then implement such a category into our existing regulatory framework.

Airworthiness

2.19 If the UK were to opt-out, the design and manufacture of opted-out aircraft would be subject to national oversight and regulations instead of the EASA regulations.

2.20 Existing microlight types would not be automatically affected by any change to the microlight definition and would not automatically be re-classified. However, owners or

⁹ [ORS4 no.1313 containing General Exemption E4390](#) to Air Navigation (Environmental Standards for Non-EASA Aircraft) Order 2008, Noise Exemption for Microlight Aeroplanes, 24 Sep 2019.

manufacturers of these existing microlight types would be able to apply for re-certification to benefit from the expanded limits within the new microlight definition.

Pilot licensing

2.21 Pilots holding one of the following licence types: UK National Private Pilot's Licence (NPPL), UK Private Pilot Licence (PPL) and EASA Light Aircraft Pilot's Licence (LAPL) or EASA PPL who wish to fly any opted-out aircraft would need to complete the minimum conversion requirements, focusing on differences training. For a description and use of differences training, see the following links:

- LAA: www.lightaircraftassociation.co.uk/PCS/pcs.html
- BMAA: www.bmaa.org/news/bmaa-news/microlight-flying-differences-training
- Air Navigation Order 2016, Art.150 and Schedule 8, Part 2, Chapter 2(4)
- EASA Part-ORO of the Air Operations Regulation [Regulation (EU) 965/2012, Annex III] AMC1 ORO.FC.125.

2.22 These minimum requirements would also be applied to instructors and examiners wishing to teach or examine the above-listed licence types in any aircraft that falls under the new definition.

2.23 For sailplanes, the current UK pilot licencing practices for pure sailplanes (that is, not capable of unassisted take-off) would remain, whereas the pilot licencing of self-launch gliders is aligned with powered aircraft practices. Current British Gliding Association operations already accommodate powered and unpowered airframes in this class.

2.24 There is uncertainty on whether the opted-out aircraft could be used for flight training or experience towards EASA flight crew licences, ratings and certificates. The eligibility of these aircraft to be used in this way will depend on their legal status in relation to the EU basic regulation. For example, EASA has recently indicated that certain categories of non-EASA aircraft could be used for such training and experience but it remains to be seen whether the opted-out aircraft would be among those categories.

Operations

2.25 In relation to overflight and maintenance in other EU member states, opted-out aircraft would be treated in exactly the same way as other existing nationally regulated aircraft.

2.26 As with other aircraft not certified in accordance with International Civil Aviation Organisation standards, there is no automatic right of flight in or over other states. However, mutual agreements would be sought with neighbouring states to enable UK aircraft to be flown in/over those states, but these cannot be guaranteed.

Conclusion

- 2.27 We have formed a working group to best understand the relative merits of opting-out of the EU basic regulation for a certain group of light aircraft up to 600kg. Doing so may introduce greater flexibility for the certification of sub-600kg aircraft by bringing them into more direct and potentially more proportionate national oversight. However, national, rather than EASA certification may limit access to EU markets and EASA's oversight of light aircraft is likely to become more proportionate itself.
- 2.28 The working group stakeholders held a majority view to support the opt-out decision as they believed the advantages outweighed the disadvantages. If we were to opt-out, the working group also felt that bringing new opted-out aircraft into a revised microlight definition would be beneficial in preference to creating a Light Sport Aircraft category. The CAA want to use this consultation to gain wider views from the general aviation community before taking a decision.
- 2.29 We now ask the community in the next chapter for its feedback to help us draw a final decision on how to proceed.

APPENDIX A**Consultation questions**

- A1 In this appendix we are now seeking feedback from our stakeholders on whether to opt the light aircraft described above out of EASA regulation and, if so, how they should be defined. The overall feedback from these questions will help determine our next steps.
- A2 We welcome the views of stakeholders in answering the questions below via the online consultation tool. The online survey contained within the consultation tool includes an option to 'Save and come back later' as you work through the questions.

Question 1

Which option would you support the UK taking?

- A) Opting out of the EASA basic regulation as described in this proposal and bringing the affected aircraft under national regulation.
- B) Keeping the status quo of factory-built aeroplanes, helicopters and sailplanes between 450-600kg under EASA regulation.
- C) No opinion/don't know

Please explain your reasoning for this choice in the following field:

- A3 If you have chosen Option B in Question 1, then question 2 does not apply.

Question 2

If we pursue the proposal, under what category would you support us defining the aircraft?

- A) Microlights
- B) Light Sport Aircraft
- C) No opinion/don't know

Please explain your reasoning for this choice in the following field:

APPENDIX B**Abbreviations**

Abbreviations	
ANO	Air Navigation Order 2016
ASTM	American Society for Testing and Materials
BCAR	British Civil Airworthiness Requirements
BMAA	British Microlight Aircraft Association
CAS	Calibrated Air Speed
CS-LSA	Certification Standard for Light Sport Aircraft
EASA	European Aviation Safety Agency
LAA	Light Aircraft Association
MTOM	Maximum Take-Off Mass

APPENDIX C**Working group stakeholder organisations**

Aircraft Owners & Pilots Association

British Gliding Association

British Microlight Aircraft Association

Flylight Airsports Ltd

Light Aircraft Association

Light Sport Aviation

P & M Aviation

The Light Aircraft Company Ltd

W-Planes