The consultation sets out the CAA's proposals with the aim to deliver on their 5 strategic objectives:

1. Simplifying regulation
2. Increasing education and understanding
3. Product safety and security
4. Safe and secure airspace
5. Supporting the UAS sector

The consultation closes on 10 January 2024, and we strongly encourage every member to respond to this consultation.

Read the full consultation and respond online here-

https://consultations.caa.co.uk/rpas/review-of-uk-uas-regulations-consultation/

Simplifying regulation

The CAA proposals include-

1. change the names of UAS subcategories from A1, A2, and A3, to the more descriptive 'Over', 'Near' and 'Far'.
2. remove the exclusions from registration and remote pilot competency requirements for 'toy' UAS.

Increasing education and understanding

The CAA proposals include-

1. extend the requirement for a remote pilot to take the Flyer ID test for UAS operations in the 'Open' category, to include when flying a UAS less than 250g with and without a camera. As well as reducing the lower limit from 250g to in the region of 50g – 100g, to exclude miniature UAS from Flyer ID requirements.
2. phase out the CAP 722 series and introduce new, user-friendly guidance material.

Product safety and security:

The CAA proposals include-

1. implement product standards and class-marking,
2. implement UK-specific product marking to help differentiate between products sold under UK and EU jurisdictions.
3. Implement a Market Surveillance Authority function.

Safe and secure airspace

This is an area where there are potentially major impacts to the model flying community.

The CAA proposals include-

Geo-awareness and Geo-fencing

Geo-awareness functionality would alert you when your aircraft is approaching restricted airspace. Geo-fencing functionality provides a stronger mitigation, by preventing your aircraft from entering restricted airspace at all.

To make geo-awareness work for model aircraft would need at least GPS telemetry fitted to the aircraft, and a transmitter with a current airspace map and a monitoring & alert function running.

To make geo-fencing work would need the aircraft to be fitted with a flight controller capable of monitoring the aircraft's position against a current airspace map and steering the aircraft away from restricted airspace.

The CAA quite rightly do not expect these requirements to apply to Model Aircraft given the technical challenges of applying this requirement and making it work on model aircraft in practice.

Remote ID

The CAA is proposing to require both network and direct remote ID.

Network RID – Uses mobile phone network data to transmit the information to a service provider, who collect the data and share it with the central government database.

Direct RID – Uses short range radio (Bluetooth) to continually transmit the information to anyone in range who can receive and decode it.

Network RID will require the involvement of the mobile phone networks and service provider(s), neither of which will do the job for free! Someone will need to pay for the RID 'service' and it is highly likely that will be the user (i.e. you).

There is no further information on how the network RID will be charged for and funded, but the current government approach to most things is 'user pays'.

Supporting the UAS sector:

The CAA proposals include-

1. extending the transition period for UAS users to adopt class-marked UAS by 2 years after the introduction of class-marking requirements on manufacturers.
2. introduce more flexible conformity assessment requirements for UAS manufacturers
3. maintaining the existing regulatory structures for model aircraft.

Model aircraft regulatory structures

The Call for Input asked what changes we could make to the regulatory framework for Model Aircraft, to support the Model Aircraft community. Potential changes include creating a separate operational sub-category for Model Aircraft and creating a clearer definition for Model Aircraft to differentiate between models and other UAS.

The CAA's view is that, on balance, the costs of change to government, the CAA and the Model Aircraft community outweigh the potential benefits from creating an entirely new regulatory framework. As such, the CAA intend to maintain the foundations of the current regulatory

framework and continue to collaborate with the Model Aircraft community to improve how regulations are applied.

We agree with the CAA position. The only requirement mandated on model flyers operating under an Article 16 Authorisation by the existing regulatory framework is the requirement for Operator registration. We would therefore be happy to collaborate with the CAA with the same aim of improving how the regulations are applied.

CAA Questions and Suggested Answers

1. Do you agree or disagree with our proposal to allow C1 UAS to fly over uninvolved people in the A1 sub-category, aligning to regulations for C0 and <250g UAS? Please explain your answer.

Agree.

The proposal is a sensible simplification and clarification of the operational rules.

2. Do you agree or disagree with our proposal to explicitly allow C0 and C1 UAS to fly in the A3 sub-category? Please explain your answer.

Agree

Any UAS should be able to be flown in a more restrictive sub-category if desired by the operator.

3. Do you agree or disagree with our proposal to align regulatory requirements in the A3 sub-category to current guidance to fly UAS a minimum of 50m from uninvolved persons? Please explain your answer.

Potentially agree depending on the detail of the proposed change.

Is the requirement a 50m horizontal distance or 50m distance which is a 'bubble' around the persons, that actually allows overflight at a minimum height of 50m?

4. Do you agree or disagree with our proposal to align regulatory requirements in the A3 sub-category to current guidance to fly a minimum of 150m from residential, commercial, industrial, recreational areas or buildings? Please explain your answer.

Disagree

What is the justification for requiring 150m separation from a building but 50m from an uninvolved person? A 150m separation from a residential area with multiple houses and their uninvolved occupants is reasonable, but the justification for the same separation from a single house with a limited number of occupants is not understood.

5. Do you agree or disagree with our proposal to re-name the A1, A2, A3 operational sub-categories to 'Over', 'Near' and 'Far'? Please explain your answer, including any other names you would suggest.

Agree.

The proposed sub-category names make it clearer what the operational sub-categories refer to.

6. Do you agree or disagree with our proposal to maintain existing names for Open, Specific and Certified operational categories? Please explain your answer.

Agree.

The existing names are reasonably clear and broadly understood throughout Europe. There is not a sufficient gain to consider re-naming them.

7. Do you agree or disagree with our proposal to remove exclusions for 'toy' UAS from registration and pilot competency requirements? Please explain your answer.

Disagree.

This seems like a disproportionate requirement which will provide a barrier to participation from those we are seeking to encourage to develop an interest in aviation. If you can launch yourself into the airspace on a paraglider/paramotor without any form of registration or competency test, it is disproportionate to impose excessive regulation on 'toys'.

8. Are there other opportunities to simplify operational regulation that we should be considering? If yes, please describe them in full.

None at present.

9. Do you agree or disagree with our proposal to require flyers of <250g UAS to take the online Flyer ID test? Please explain your answer.

Disagree

Keep the threshold at 250g unless fitted with a camera.

10. Should the CAA introduce a minimum weight threshold, in the region of 50g – 100g, that aims to exclude miniature UAS from Flyer ID requirements? Please explain your answer.

Disagree

Keep the threshold at 250g unless fitted with a camera.

11. Do you agree or disagree with our proposal to require manufacturers to present important regulatory information on the user interface or controller app to C0-C3 UAS users at product set-up? Please explain your answer, and consider whether manufacturers should update the digital information notice or communicate safety information to UAS flyers at the request of CAA. Please explain your answer.

Disagree

What is the point of the DMARES registration system, which gains the contact information of all operators and remote pilots, if the system is not used to communicate important regulatory information to operators and remote pilots?

A requirement on manufacturers to signpost users to the legally required DMARES registration system at product setup could be acceptable, but the onus on providing safety and regulatory information to operators and remote pilots should be on the CAA. Is that not what we pay for as part of the DMARES system?

12. Do you agree or disagree with our proposal to phase out the CAP 722 series and introduce new, user-friendly guidance material? Please explain your answer.

Agree.

The current CAP722 series is complex, hard to understand and provides many opportunities for mistakes to be introduced.

13. Are there other opportunities to improve education and understanding that we should be considering? If yes, please describe them in full.

Yes.

Use the DMARES system to regularly and clearly communicate to the community. If there is regular communication from the CAA of useful information, it should create a better understanding of the value of registration and providing the personal information to the CAA.

Update the DMARES system to obtain data to identify the type of activity that operators are engaged in (model flying versus other UAS). This is the only way that it can be established whether new and future regulatory proposals are proportionate for the model flying community.

14. Do you agree or disagree with our proposal to implement class-marking and product standards? Please explain your answer, and provide any further feedback on the technical standards we intend on assessing, if possible.

Agree.

The standards should be aligned with other international standards and should not be UK specific.

15. To what extent should the UK align to the EU regulatory framework for product requirements? Please explain your answer.

The UK should be aligned as fully as possible with the EU. The UK is a small market compared to the EU, and alignment will increase the range of UAS available, and reduce the cost of entering the UK market.

16. Do you agree or disagree with our proposed changes to product requirements, as set out in paragraph 4.4? Please explain your answer.

Disagree.

The UK should be aligned as fully as possible with the EU. The UK is a small market compared to the EU, and alignment will increase the range of UAS available, and reduce the cost of entering the UK market.

17. Do you agree or disagree with our proposal to use UK-specific class identification labels on class-marked UAS, to differentiate between UAS compliant under UK and EU legislation? Please explain your answer.

Disagree.

The UK should be aligned as fully as possible with the EU. The UK is a small market compared to the EU, and alignment will increase the range of UAS available, and reduce the cost of entering the UK market.

18. Do you agree or disagree with our proposed approach to enable the implementation of the MSA? Please explain your answer.

Agree

The CAA should be the MSA, as the central body responsible for the oversight of aircraft in the UK. That is provided that amateur-built aircraft (such as model aircraft) are not required to submit data to the MSA, and the requirement applies only to complete aircraft systems being placed on the market.

19. Are there other opportunities to improve UAS product safety and security that we should be considering? If yes, please describe them in full.

None at present.

20. Do you agree or disagree with our proposed technical approach to implementing Remote ID? Please explain your answer, and consider our proposed approach of Hybrid Remote ID and on-device enforcement.

Disagree.

The whole premise of remote ID is an unnecessary imposition and burden on all UAS operators. The response to the previous consultation was a majority disagreeing with the introduction of remote ID.

Justification for imposing the requirement on the model flying is required. Of the claimed 18,290 flights reported to the police, how many were model aircraft and how many times has there been a requirement to identify a model flyer? Unless there is a clear justifiable need, it is a completely disproportionate requirement.

The DMARES system needs to be updated to identify the type of activity that operators are engaged in (model flying versus other UAS). This is the only way that it can be established whether new regulatory and future proposals are proportionate or sledgehammers to crack non-existent nuts.

Disagree.

The requirement for a hybrid network / direct approach will lead to a significantly increased financial cost for operators including the mobile data connection and the network service provider fees.

21. Do you agree or disagree with our proposed policy approach to Remote ID? Please explain your answer, and consider our proposed approach to product and operational requirements, legislative enforcement and data privacy, access and security.

Agree with the approach to product requirements if remote ID is to be introduced.

The standards referenced are appropriate international standards for the equipment. Whatever equipment is used in the UK should be to an international standard, so that equipment manufactured for use in other localities (such as the UAS or the EU) will work in the UK. That will increase availability and lower the cost burden of the equipment on operators in the UK.

Disagree with the approach to legislative enforcement.

There are insufficient police to enforce current levels of rural crime. Adding additional offences with little likelihood of enforcement in reality does not foster a positive attitude amongst the law-abiding populace.

Disagree with the approach to direct RID data privacy.

All the data of the flight, including the pilot's location will be available to anyone who can receive the RID transmission.

Can the CAA explain more fully how requiring the public transmission of data meets the statement made that 'Our approach to data privacy would be compliant with the Data Protection Act 2018 and therefore GDPR principles.'

If a hybrid approach is to be implemented, model aircraft which are predominantly flown in more remote locations will be more likely to be in direct RID mode due to unavailability of a data connection for network RID. That will lead to model aircraft RID data being publicly available to anyone in reception range.

22. Do you agree or disagree with our proposed scope of Remote ID requirements? Please explain your answer, and consider our proposed approach to UAS in scope, legacy UAS and Model Aircraft.

Agree conditionally with the proposed approach to model aircraft if remote ID is to be introduced.

The definition of model aircraft is whatever an aeromodeller decides to try flying that day. The definition should not be dependent on the machine, but the use the machine is to be put (the approach taken in the EU regulations).

The exemption for model aircraft should extend to those operating within the framework of an association, rather than be limited to those operating at club sites.

The approval of the locations for practical expediency should be delegated to the model flying associations, with a similar approach to the existing delegated approval of sites for flying larger model aircraft over 400ft. The approval process should include locations where model aircraft are regularly operated within the framework of an association, not just club sites. The associations can then deal with the approvals without encumbering both the CAA and the model aircraft operators with the administration and overhead of the application, assessment and approval process.

There will be a significant cost for individual aeromodellers to purchase the remote ID equipment, subscribe to the service provider and maintain a data connection for the remote ID which will raise the threshold for participation and therefore serve to negatively impact participation.

Will the cost be borne by the commercial operators who are expected to get the benefit of revenue from BVLOS operations?

Section 4.45.2 of ASTM F3411 – 19 includes specific provision for model aircraft under network remote ID-

> *Network Remote ID also includes provisions for participation in Remote ID by non-equipped UAS (that is, UAS that are neither broadcast capable nor equipped to communicate with a Remote ID Service Provider during flight, such as most radio-controlled model aircraft).*
>
> *These non-equipped network participants report their operations (for example, aircraft ID, location in terms of a volume of airspace, operating times) in advance.*

This provision would allow model aircraft flown outside of the model exemption to comply with the remote ID requirements using just a smartphone app, with no need for additional equipment or data connection subscriptions.

As time progresses, the overall requirement may be solved by technical developments and equipment manufacturers incorporating remote ID into their C&C radio equipment.

This will only be of practical use, however, if the UK is aligned with international standards. One of the world's largest radio control equipment manufacturers produces RID equipment that is for the Japanese market, but does not meet any other national / international standards. That shows that there is already fragmentation of the market that does not benefit users or regulators (despite paragraph 5.5), and discourages acceptance of requirements that are hard / expensive to comply with.

The fitting of RID equipment to model aircraft has the potential for technical difficulties both with the model aircraft and its systems and the functioning of the RID equipment.

1. There is a wide and varied combination of avionics / C&C radio systems that can be fitted to model aircraft, most using the 2.4GHz band. If RID equipment is required to be fitted to the aircraft, there is a significant risk of incompatibilities between the two radio systems in close proximity on the airframe both using the 2.4GHz band. These RF incompatibilities have a likelihood of reducing the communication range of both the C&C radio and the RID equipment, leading to more aircraft losing C&C radio link and crashing.
   This will lead to a harder 'sell' to model aircraft flyers that the benefit of RID and the potential risk of being caught not equipping their aircraft with remote ID where required will outweigh the risk of damage to their aircraft.

2. The location in the aircraft of the RID equipment and the material of the aircraft's construction will have a large impact on the transmission and reception effectiveness of the RID equipment. Being installed inside a carbon fibre airframe will give no GNSS reception and little external transmission, while being mounted upside down will give little GNSS reception.

23. Do you agree or disagree with our proposal to implement geo-awareness for UAS? Please explain your answer.

Agree with the approach for model aircraft.

Fitting such equipment to model aircraft would be impractical and disproportionate.

24. Do you agree or disagree with our proposal to implement geo-fencing for UAS? Please explain your answer.

Agree with the approach for model aircraft.

Fitting such equipment to model aircraft would be impractical and disproportionate.

25. Do you agree or disagree with our proposal to require remote pilots to have an active flashing light on their UAS for operations at night? Please explain your answer.

Agree.

Lighting UAS flown at night is an eminently sensible idea for aviation safety. A manned aircraft carrying out a practice or real forced landing at night would have no chance to avoid an unlit UAS at night.

26. Are there other opportunities to promote safe and secure airspace that we should be considering? If yes, please describe them in full.

As per previous comments, utilise the DMARES system to communicate information to operators and remote pilots. One of the original motivations for registration was to know who the operators and pilots were and be able to communicate with them. Currently it is a wasted opportunity.

27. Do you agree or disagree with our proposal to extend the transition period for adoption of class marked UAS by UAS operators? Please explain your answer.

Disagree

The transition period should be extended indefinitely. The number of 'legacy' non class marked UAS will be reduced by natural attrition over time as they are replaced by more capable machines and spare parts / batteries become unavailable.

Allowing under 250g legacy UAS to continue to fly over uninvolved people while preventing larger UAS from flying no closer than 50m to uninvolved people is illogical and inconsistent. The existing

UAS flown in the A2 class will not become any less safe on 1 Jan 2028, while the number of non class marked aircraft will be reduced by natural attrition.

28. How many years should CAA extend the transition period for operation of class marked UAS by? Please explain your answer.

The transition period should be extended indefinitely, for the reasons given in 27 and 29.

29. Do you agree or disagree with our proposal to extend the transition period for UAS operators to adopt class marked UAS from 1st January 2026 to 1st January 2028? Please explain your answer.

Disagree

The transition period should be extended indefinitely. The number of 'legacy' non class marked UAS will be reduced by natural attrition over time as they are replaced by more capable machines and spare parts / batteries become unavailable.

Allowing under 250g legacy UAS to continue to fly over uninvolved people while preventing larger UAS from flying no closer than 50m to uninvolved people is illogical and inconsistent. The existing UAS flown in the A2 class will not become any less safe on 1 Jan 2028, while the number of non class marked aircraft will be reduced by natural attrition.

30. What changes should we make to the approach to conformity assessment of class-marked UAS? Please explain your answer.

To enable class marked UAS to be placed on the market as quickly as possible, manufacturer self-declaration should be allowed for all class markings.

As the class-marked UAS are for use in the Open category, the risks of operation are lower than the specific category where full assessment is more likely to be needed.

31. Do you agree or disagree with our proposal to maintain the existing regulatory approach for Model Aircraft? Please explain your answer.

Agree.

The things that cause the most inconvenience to model flyers (such as operator registration and paying an annual fee) would not be removed by a changed regulatory approach.

The current article 16 authorisation process for model aircraft associations has now reached a steady state after considerable work to define and refine.

Devising a new regulatory approach for model aircraft would not produce benefits worth the cost or effort from either the CAA or the model aircraft associations' perspective and may ultimately result in something even less favourable for the model flying community.

The only requirement mandated on model flyers operating under an Article 16 Authorisation by the existing regulatory framework is the requirement for Operator registration. We would therefore be happy to collaborate with the CAA with the same aim of improving how the regulations are applied.

32. Are there other opportunities to support the UAS sector that we should be considering? If yes, please describe them in full.

As per previous points, better communication via the DMARES system would be a good start, rather than just using it to communicate when operators need to pay again.

More support could be provided to the model flying community. It is a ridiculous situation we find ourselves in when model flying is subject to more onerous regulation than some forms of manned aviation. You can fly a glider solo at 14, you can fly a paraglider solo at 16 without any form of test or registration but you have to be 18 to register as an operator of a model aircraft which has always been the first rung on the aviation ladder. The current requirements remain disproportionate and a barrier to participation. If the UK wants to be the best place in the world for aviation, it needs to be as easy as possible for the future generations of engineers, scientists, pilots and other STEM careers to develop their skills.

A1. Do you agree or disagree with our qualitative categories for costs and benefits across the user and stakeholder groups, set out in Appendix A? Please elaborate if there are other costs and/or benefits we haven't identified.

For model aircraft operators / pilots, apart from the benefit of being allowed to fly legally at all, there are few other obvious benefits.

There will be a cost to the model aircraft associations to create processes, guidance material and educational material for members

All the costs will need to be borne by the members which will serve as a further barrier to participation.

A2. What are your current costs across these categories, particularly training/certification, product/service development, and other compliance? Please provide an estimate of costs (£) where possible or qualitative explanations.

For model aircraft flown in the framework of an association, the majority of training is provided by unpaid volunteers at no cost. They do have to spend their own time understanding their compliance responsibilities.

The cost for model aircraft compliance with the UAS regulations is currently the cost of operator ID marking on each airframe, which is very close to zero.

A3. What additional up front or ongoing costs do you expect to incur, in order to comply with these proposals? Please provide an estimate of costs (£) where possible or qualitative explanations.

For a model aircraft that would require RID to be fitted, the cost of equipment appears to be in the range of £100 - £300 per unit.

It is assumed that the network RID would require a data subscription of a minimum of £5 per month and a subscription to the network provider of some as yet undisclosed cost, but assumed to be a minimum of £5 per month.

That leads to an annual running cost of £120 per year for any model aircraft operator who flies outside of the approved site network at all, in addition to the up front cost.

While equipment could be moved between aircraft, that is a significant additional cost to zero that is paid today and a disproportionate requirement.