Title: Alcohol Limits, and Alcohol and Drugs Offences for Unmanned Aircraft	De Minimis Assessment (DMA)
Date: 07/03/22	**Stage**: Final
DMA No: DfTDMA240	**Source of intervention**: Domestic
Lead department or agency: Department for Transport	**Type of measure**: Primary
Other departments or agencies: Click here to enter text.	
Summary: Rationale and Options	**Contact for enquiries:** FutureofFlight@dft.gov.uk

Total Net Present Value	Business Net Present Value	Net cost to business per year (EANDCB in 2019 prices)
NQ	NQ	£0.07 million

Rationale for intervention and intended outcomes

With associated provisions in the Implementing Regulation (EU) 2019/947 ("IR") and Air Navigation Order ("ANO") 2016, it is currently an offence for a remote pilot of an unmanned aircraft to fly in the Open or Specific categories of operation (as set out in the IR) 'under the influence of psychoactive substances or alcohol […]'. There are no limits for the amount of alcohol that can be consumed, nor are there any powers for the police to be able to collect specimens for the purposes of enforcement.

Having no limits for alcohol consumption in law gives the community a lack of certainty around what limits are appropriate for operating unmanned aircraft, and is an example of the current inadequate law around alcohol and drugs for safety critical persons involved with operating an unmanned aircraft. This poses a risk that unmanned aircraft could be operated unsafely due to alcohol consumption, which could lead to injury or damage. Without the appropriate police powers to require a specimen without consent, it makes it difficult for the police to effectively manage and enforce alcohol and drug consumption related offences with unmanned aircraft and may risk the ability of police to successfully prosecute related offences.

The policy objectives and the intended effects:

1. Greater safety and communication**:** ensuring there are limits of alcohol that are considered appropriate for operating unmanned aircraft, for better safety, and that they are conveyed clearly, to enable a simple understanding for the users of these technologies.
2. To capture all safety critical persons involved with operating an unmanned aircraft in requirements
3. Improved efficiency in enforcement for alcohol and drug offences related to unmanned aircraft.

Describe the policy options considered

In order to meet our policy objectives outlined above, a change to primary legislation is required to provide the better enforcement powers to police. Also, alcohol limits can only be mandated by law. As a result, no alternatives to regulation are included in this De Minimis Assessment ("DMA"). This DMA discusses the various policy options considered for introducing alcohol limits:

0) Do nothing.
1) Set limits proposed during the Future of Transport Regulatory Review 2021: mirroring the limits for critical rail operators under the Rail Industry Standard RIS-8070-TOM (less than the limits for road vehicle operation) for the Open category, and mirroring the limits for performing an aviation function (or activity which is ancillary to an aviation function), i.e. "manned aviation", for the purposes of Part 5 of the Railways and Transport Safety Act ("RTSA") 2003 for the Specific and Certified categories.
2) Set limits aligned with the operation of road vehicles in the Road Traffic Act ("RTA") 1988, (mirroring the respective limits for each part of the UK), for the Open category, and set limits aligned with manned aviation for the Specific and Certified categories.
3) Set limits aligned with the operation of road vehicles in the RTA 1988 (mirroring the respective limits for each part of the UK) for all risk categories (Open, Specific and Certified)
4) Set limits aligned with manned aviation for all risk categories (Open, Specific and Certified).
5) Set varying limits for different operations in the Open category (such as differentiating between leisure and commercial operations, or differentiating between different classes of unmanned aircraft), and set limits aligned with manned aviation for the Specific and Certified categories.

The 'Open' category is for the lowest risk operations, the 'Specific' category is for higher risk operations and the 'Certified' category is for the highest risk operations, as set out in the IR.

Rationale for DMA rating

HM Treasury and the Ministry of Justice appraisal guidance is to not estimate the impacts of individuals and organisations that have broken the law. Therefore, we do not estimate the costs to businesses for participating in alcohol tests. Instead, we focus on the costs to legitimate business activity, which in this instance is only familiarisation costs for commercial operators and remote pilots of unmanned aircraft. The impact for other stakeholders, including non-commercial operators and/or remote pilots of unmanned aircraft, police, Criminal Justice System and third parties are qualitatively described but not estimated here to keep the analysis proportionate.

In our monetised analysis, the total familiarisation costs to businesses in the central scenario is £693,000, in 2021 prices and 2022 present values. In our sensitivity analysis, in the central scenario, there would need to be approximately 51,000 commercial operators required to read and understand the new law and any guidance for the Equivalent Annual Net Direct Cost to Business ("EANDCB") threshold to be exceeded. In the low and high scenarios there would need to be 687,000 and 9,000 operators respectively. As even the high scenario would require an increase in our estimate for the number of commercial operators (7,000) of 25% and a high number of unmanned aircraft remote pilots per operator, we are confident that the EANDCB will not exceed £5,000,000.

The introduction of limits and new police powers to improve enforceability is not expected to significantly increase the amount of offences committed or the number of offences prosecuted. Therefore, although there could be small impacts on the criminal justice systems, we would expect these impacts to be minimal. Clearer regulations specific to unmanned aircraft operators and remote pilots could reduce imperfect information and may act as a deterrent to flying under the influence of alcohol or drugs, resulting in an overall decrease in such incidents. On the other hand, by providing police with clearer guidance and more robust powers, there could be an increase in the number of arrests as they will have more enforcement power. Overall, we cannot be sure of the magnitude of each of these effects. However, we would broadly expect the net effect to be small, so the impact on the criminal justice system has not been monetised here. A Justice Impact Test will be carried out and these impacts assessed in further detail.

Will the policy be reviewed? Yes	The policy will be reviewed on an ongoing basis to ensure the objectives described above are being achieved.			
Are these organisations in scope?	**Micro** Yes	**Small** Yes	**Medium** Yes	**Large** Yes

Senior Policy Sign-off:	✓	Date:	17/06/2022
Peer Review Sign-off:	✓	Date:	16/06/2022
Better Regulation Unit Sign-off:	✓	Date:	07/03/2022

1 Policy Rationale

1.1 Policy background

1. We live in an era of unprecedented change, to our businesses, our economies and our societies. Technological advancement has become a key driver of this change. The emergence of unmanned aircraft, including drones, and drone-powered solutions are good examples of where disruptive technologies are being rapidly developed to deliver new products and services to a range of industry sectors [1].

2. Today, unmanned aircraft are already being used to great effect and have become increasingly popular in the commercial and private market and in the public sector in recent years. There are almost 7,000 registered organisations with Operator IDs and around 320,000 registered operators and/or remote pilots [2]. Unmanned aircraft are already being used to improve and deliver services in our everyday life. Using Civil Aviation Authority ("CAA") data, the Department for Transport (DfT) has previously estimated that there could be between 20,000 to 30,000 commercial unmanned aircraft operators by 2030 [3]. These forecasts are highly uncertain as they depend on factors such as the growth in awareness of unmanned aircraft uses, the speed at which businesses can adapt to technological advancements, changes in the public perception towards increasing unmanned aircraft usage and the point at which market saturation will occur.

3. Unmanned aircraft come in a variety of sizes and are a springboard for innovation and improvement. The application of unmanned aircraft to everyday challenges is increasing efficiency and safety, delivering better services to customers and members of the public, and saving money, bringing vast economic benefits for businesses and the public sector. For example, as part of the DfT funded and Connected Places Catapult ("CPC") delivered Drone Pathfinder Programme, Yorkshire Housing have demonstrated how unmanned aircraft can be used for building inspections, finding that they can provide more than ten times return on investment by enabling more targeted maintenance. HS2 Ltd have also extensively utilised unmanned aircraft, using them to survey the route, to monitor and protect local wildlife and to plant seeds to rejuvenate woodlands impacted by the construction. Thanks to such use cases, the potential economic value of unmanned aircraft is huge, with PwC estimating that unmanned aircraft could have a cumulative impact of £42 billion on the UK economy by 2030 [4].

4. The development of High-Altitude Platforms (drones operating at the edge of space) and infrastructure, including vertiports and unmanned aircraft hubs, and other enabling technology is expected in the foreseeable future. Our ambition is to lead the world in innovative aviation technology that has a transformative effect on the movement of people and goods, and delivers tangible benefits to communities, industry and users.

5. To maintain a safe operating environment and to build public trust in the use of unmanned aircraft as they are used more frequently and in new capacities will be crucial to the eventual success of the market. Ensuring adequate law is in place around the use of alcohol and drugs for the operation of unmanned aircraft and the appropriate police powers for effective enforcement of associated offences is an essential component of this.

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[1] A disruptive technology is one that significantly alters the way that businesses operate. It may force companies to alter the way that they approach their business, risk losing market share or risk becoming irrelevant. Recent examples of disruptive technologies include smartphones or advanced genomics.

[2] CAA Drones and Model Aircraft Registration and Education Scheme ("DMARES") data, April 2022 (unpublished)

[3] DfT "Taking Flight: The Future of Drones in the UK Government Response", January 2019. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937275/future-of-drones-in-uk-consultation-response-web.pdf

[4] PwC 'Skies Without Limits', 2018. Available at: https://www.pwc.co.uk/intelligent-digital/drones/Drones-impact-on-the-UK-economy-FINAL.pdf

1.2 Problem under consideration

6. This sizeable future market for unmanned aircraft brings with it increased levels of risk. Unmanned aircraft may be used more routinely for deliveries and leisure, and may be integrated into unsegregated airspace with manned aviation, whilst beyond visual line of sight ("BVLOS") operations may become the norm. The risks associated with these use cases are increased when coupled with the risks associated with a person having consumed alcohol or drugs and operating an unmanned aircraft.

7. An airprox incident is a situation in which the distance between two aircraft, as well as their position and speed, may have compromised their safety. In 2021 up to November, there were 74 airprox incidents involving unmanned aircraft systems of lower mass [5]. In 2020, there were 69 high-severity Mandatory Occurrence Reports ("MORs") involving remotely piloted aircraft systems, with 334 occurrences in total [6]. In 2021, over 6,000 incidents involving drones were reported to the police [7]. As the unmanned aircraft market grows, it is likely that the number of incidents will increase, we therefore need to ensure that adequate regulation for alcohol and drugs are in place to protect operators and the wider public.

8. As far as current legislation goes, it is currently a criminal offence in the ANO 2016 to breach the provisions in the IR, which state "the remote pilot shall not perform duties under the influence of psychoactive substances or alcohol" in the Open or Specific category. This offence is punishable on summary conviction with a maximum penalty of a level 4 fine on the standard scale (currently £2,500 across the United Kingdom).

9. However, "under the influence" is not defined and there are no specific limits in these requirements as to the safe amount of alcohol detected in blood, urine or by breath when a person is operating unmanned aircraft. This poses a risk that unmanned aircraft could be operated unsafely due to alcohol consumption, which could lead to injury or damage. HMG's vision is for the UK to be the leader in unmanned aircraft technology applications. As this technology develops, we want to ensure at every step of the way that the UK environment is competitive internationally, attracting unmanned aircraft application developers to the UK, whilst ensuring public safety and trust in these technologies. Not having adequate regulation for alcohol and drugs, including clearly defined limits of alcohol for safety critical persons involved with operating unmanned aircraft in law, poses a risk to achieving this vision.

10. In addition, there are currently no powers for police to administer tests and require specimens without consent, as is provided for in the RTSA 2003 in relation to aviation more generally or in the RTA 1988 in relation to motor vehicles. This makes it difficult for the police to effectively manage and enforce alcohol and drugs consumption related offences with unmanned aircraft and may risk the ability of police to successfully prosecute on related offences. It is vital for the police to be able to effectively manage and enforce the law surrounding alcohol consumption and psychoactive substance use associated with operating unmanned aircraft.

[5] UK Airprox Board 'UA and Other Airprox Count and Information 2022', April 2022. Available at: https://www.airproxboard.org.uk/Topical-issues-and-themes/Drones/

[6] CAA 'CAP2247: UK Annual Safety Review 2020', 2 September 2021. Available at: https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=10827

[7] National Police Chiefs Council ("NPCC") data, 2021 (unpublished)

11. Together, the uncertainty relating to limits for alcohol consumption and not having an effective legislative framework that gives the police required enforcement powers poses safety risks to the public. This also risks lessening both public confidence and acceptance of unmanned aircraft, which could slow the introduction of new or novel aircraft into UK and negatively impact the realisation of the benefits they can bring. In wave 7 of the DfT 'Transport and Transport Technology: Public Attitudes Tracker', just under half of respondents cited possible crashes, accidents or collisions as a concern regarding the use of unmanned aircraft [8]. It is vital that we allay these concerns as they could act as a blocker to unmanned aircraft being developed further and to the UK achieving its vision to be the leader in these technologies.

12. As well as allowing the police to effectively investigate those suspected of breaching associated offences and enforce those offences, intervention is required to ensure the regulation is proportionate and tailored to the unique characteristics of the unmanned aircraft market, whilst also being clear and unambiguous to users of unmanned aircraft. This allows the UK market to continue to be internationally competitive. It also provides public reassurance and confidence in the safety of innovative technologies and the ability of police to effectively enforce unlawful behaviour in relation to alcohol and psychoactive substances and the operation of unmanned aircraft technologies.

1.3 Rationale for intervention

13. Government intervention seeks to address the following market failures:

- Negative externalities – The operation of unmanned aircraft can be complex and the capacity to safely operate the aircraft under the influence of alcohol or drugs may be impaired. Reaction times and the propensity for risky behaviours may be increased, leading to higher levels of risk for people, property and aircraft within the vicinity of an unmanned aircraft operation. By introducing clear alcohol limits applicable to the operation of unmanned aircraft, and wider drugs and alcohol legislative provisions, we could reduce the probability and impact of incidents occurring due to alcohol consumption, reducing the overall risk of unmanned aircraft operations. A large proportion of the benefits of reduced risk will impact those who were not involved in the original consumption of drugs or alcohol, thus Government intervention in this area can help mitigate this negative externality.

- Imperfect information – The lack of clarity in the current regulations could lead to persons critical to the safe flying of an unmanned aircraft operating under the influence of drugs or alcohol if they are unaware of it being unlawful, or if they are unaware of the safe limits of alcohol consumption, beyond which they may be impaired. The lack of clarity also makes it more difficult for police officers to enforce the law, again potentially leading to an unsafe airspace.

1.4 Policy objective

14. The objective of setting clearly defined limits of alcohol for unmanned aircraft is in line with the Government's levelling up agenda and wider strategic priorities of building back safer and fairer, as well as other areas of Government, for example, the Department for Business, Energy and Industrial Strategy's ("BEIS") R&D Roadmap and the Department for International Trade's ("DIT") Future Technology Trade Strategy.

[8] DfT 'Transport and transport technology: public attitudes tracker – Wave 7', 23 November 2021. Available at: https://www.gov.uk/government/publications/transport-and-transport-technology-public-attitudes-tracker

15. We have defined our main policy objectives, which will underpin our alcohol limits and psychoactive substance policy design. These objectives helped to structure our questions in the Future Flight Regulatory Review 2021 consultation. These objectives are:

    1. Greater safety and communication**:** ensuring there are limits of alcohol that are considered appropriate for operating unmanned aircraft, for better safety, and that they are conveyed clearly, to enable a simple understanding for the users of these technologies.
    2. To capture all safety critical persons involved with operating an unmanned aircraft in requirements.
    3. Improved efficiency in enforcement for alcohol and drug offences related to unmanned aircraft.

1.5 Options considered

16. Under the status quo, the IR defines three operational risk categories for unmanned aircraft. These categories are:

    - The 'Open' category (lowest risk operations, within visual line of sight such as flying a drone in a park away from people)
    - The 'Specific' category (operations that require prior approval from the CAA such as flying an unmanned aircraft for an inspection of a building or over a crowd for wedding photography)
    - The 'Certified' category (which is the highest risk of operations, such as carrying dangerous goods or carrying people. This category requires the certification of the operator and the unmanned aircraft, and where applicable the licensing of the remote pilot).

17. Under the current regulatory position, which is outlined above in paragraphs 8-11 of the 'problem under consideration' section, the CAA has issued guidance in its CAP 722 document on the limits of alcohol consumption to observe in each of the IR operational categories. Noting the uncertainty in law regarding the applicable limits set out above, the CAA has provided the following guidance:

Figure 1: Guidance provided by the CAA in CAP 722 on alcohol limits when flying an unmanned aircraft

Open category	CAA guidance suggests a person should adhere to the same limits of alcohol consumption as operating a road vehicle in the RTA 1998
Specific category	CAA guidance suggests a person should adhere to the same limits of alcohol consumption as required when performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the RTSA 2003
Certified category	CAA guidance suggests a person must adhere to the same limits of alcohol consumption as required when performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the RTSA 2003

18. For comparison purposes to the options of alcohol limits looked at in this DMA, Figure 2 shows the existing alcohol limits for aviation and motor vehicles:

Figure 2: Existing alcohol limits for aviation and motor vehicles for comparison purposes

Transport Mode	Prescribed limits: breath (microgrammes / millilitres)	Prescribed limits: blood (milligrammes / millilitres)	Prescribed limits: urine (milligrammes / millilitres)
Aviation	9µg/100ml	20mg/100ml	27mg/100ml
Aviation (licenced aircraft maintenance engineers)	35µg/100ml	80mg/100ml	107mg/100ml
Motor vehicles (England and Wales and Northern Ireland)	35µg/100ml	80mg/100ml	107mg/100ml
Motor vehicles (Scotland)	22µg/100ml	50mg/100ml	67mg/100ml

Future of Flight Regulatory Review Consultation 2021

19. The consultation proposed alcohol limits (as set out in Option 1 of this document) and asked respondents if they agreed or disagreed with those limits. It also asked respondents to suggest what limits should be applied to each category of operation (as given by the IR) and to supply any supportive evidence or information for any views given.

20. Analysis indicated about one third of the respondents who provided an answer to the question relating to proposed alcohol limits agreed with the proposed limits, with about one third of the respondents who provided an answer disagreeing. The other third of respondents were not sure. Reasons for supporting the proposed limits included proportionality regarding the risk of each category of operation and the limits for operating in the Open category only being marginally more lenient than the others.

21. Of those who disagreed with these proposed limits, the majority felt that the limits that are applicable to manned aviation were more appropriate i.e. performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the RTSA 2003 applying across all categories (therefore in support of Option 4). Reasons for supporting manned aviation limits included that the limits already exist and have been found to be effective. There was support to apply manned aviation limits to at least the Specific and Certified categories, fitting with Option 1 or 2. This preference may also be captured by Option 4, and Option 5 depending on implementation. Another common theme was the suggestion that the Open category of operation should not have a less stringent limit than the other categories of operation, and it was also mentioned that any object in the air, regardless of size, could cause harm. Some responses pointed to the fact that the Open category is the least regulated and some responses pointed to the risk of causing confusion by having different limits for different categories of operation; these suggestions would be captured by Option 4.

22. An alternative reason given by a few respondents for disagreeing with the limits proposed during the 2021 consultation (as reflected in Option 1) included suggesting the limits that exist for alcohol consumption when driving a motor vehicle would be more appropriate for the Open and Specific categories (therefore in support of Option 3, and possibly some support for Option 5 depending on how it could be implemented). Responses of this nature suggested that flying an unmanned aircraft is less risky than driving a vehicle and that the proposals in the 2021 consultation (i.e. Option 1) for the Open and Specific categories are therefore too stringent.

23. A few respondents indicated the alcohol limits should be zero – either for all three categories or just for commercial or public service pilots – which has been discounted as an option given it is not proportionate to other limits across transport in the UK (road vehicles, manned aircraft, maritime) and because of naturally occurring blood alcohol content.

24. There were some questions raised regarding how alcohol limits would be enforced by police.

Option 0: Do Nothing

25. Under the 'Do Nothing' option, it would continue to be unclear to users of unmanned aircraft, as well as to the public and police, what the legal and safe limits of alcohol are whilst operating unmanned aircraft were. It would also remain difficult for the police to ascertain if someone was under the influence of alcohol or drugs without the necessary powers, such as compelling a sample. Doubt and concern could emerge from the public on the ability of police to enforce the law as it currently stands, which could negatively affect public acceptance and integration of new or novel aircraft into UK society. This poses a potential barrier to achieving the Government's vision for the UK to a world leader in unmanned aircraft technology applications. As the unmanned aircraft market develops, the impact of these issues would increase, and others might come to light. This poses a risk to being a blocker to new or novel technologies and the benefits they could bring to the UK.

Option 1: Set limits proposed during the Future of Flight Regulatory Review 2021

26. The limits for the Open category would mirror those set for critical rail operators in the Rail Industry Standard RIS-8070-TOM (less than the limits for road vehicle operation). The limits when performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the RTSA 2003 would be mirrored for the Specific and Certified categories.

27. This option proposes to prescribe in legislation the following specific limits in the proportion of alcohol in the breath, blood or urine of a safety critical person involved with operating unmanned aircraft immediately before, whilst, or immediately after flying an unmanned aircraft:

Figure 3: Option 1 proposed limits

Category of operation	Prescribed limits: breath (microgrammes / millilitres)	Prescribed limits: blood (milligrammes / millilitres)	Prescribed limits: urine (milligrammes / millilitres)
Open category	13µg/100ml	29mg/100ml	39mg/100ml
Specific category	9µg/100ml	20mg/100ml	27mg/100ml
Certified category	9µg/100ml	20mg/100ml	27mg/100ml

28. This option provides for more leniency in the Open category, but it is still fairly stringent which promotes greater safety when less experienced people are operating in this less regulated category of operation. It also reflects that there is still risk associated with operations in the Open category. However, it is more stringent than the legal limits for operating a road vehicle, which may be too stringent for some of the operations that could occur in the Open category. It also means that there would be two limits for people to become familiar with and to remember.

Option 2: Set limits equivalent to road vehicles and manned aviation

29. Set limits aligned with the operation of road vehicles in the RTA 1988, respective to each part of the UK, for the Open category and set limits aligned with performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the RTSA 2003 to the Specific and Certified categories.

30. This option proposes to prescribe in legislation the following specific limits in the proportion of alcohol in the breath, blood or urine of a safety critical person involved with operating unmanned aircraft immediately before, whilst or immediately after flying in each category of operation:

Figure 4: Option 2 proposed limits

Category of operation	Prescribed limits: breath (microgrammes / millilitres)	Prescribed limits: blood (milligrammes / millilitres)	Prescribed limits: urine (milligrammes / millilitres)
Open category	35µg/100ml *	80mg/100ml *	107mg/100ml *
Specific category	9µg/100ml	20mg/100ml	27mg/100ml
Certified category	9µg/100ml	20mg/100ml	27mg/100ml

**Applicable to England, Wales and Northern Ireland for road vehicle operations. In Scotland, the limits are 22µg/100ml, 50µg/100ml and 67µg/100ml for breath, blood and urine respectively.*

31. The familiarisation with this option may be simpler as the general public may already be more aware of the legal limit for driving a road vehicle, as they may have a realistic image of how many drinks they can safely have before the legal alcohol limit is reached, or when they become impaired. A second limit would need to be familiarised with by those operating in the Specific and Certified categories. However, given the Open category is the least regulated and allows for less experienced persons carrying out operations of unmanned aircraft within it, a higher limit may not necessarily be, or be considered to be, proportionate to the potential risk.

Option 3: Set all limits equivalent to road vehicles

32. Set limits aligned with the operation of road vehicles in the RTA 1988, respective to each part of the UK, for all categories of operation.

33. This option proposes to prescribe in legislation the following specific limits in the proportion of alcohol in the breath, blood or urine of a safety critical person involved with operating unmanned aircraft immediately before, whilst or immediately after flying in each category of operation:

Figure 5: Option 3 proposed limits

Category of operation	Prescribed limits: breath (microgrammes / millilitres)	Prescribed limits: blood (milligrammes / millilitres)	Prescribed limits: urine (milligrammes / millilitres)
Open category	35µg/100ml *	80mg/100ml *	107mg/100ml *
Specific category	35µg/100ml *	80mg/100ml *	107mg/100ml *
Certified category	35µg/100ml *	80mg/100ml *	107mg/100ml *

**Applicable to England, Wales and Northern Ireland for road vehicle operations. In Scotland, the limits are 22µg/100ml, 50µg/100ml and 67µg/100ml for breath, blood and urine respectively.*

34. The familiarisation with this option may be simpler as the general public may already be more aware of the legal limit for driving a road vehicle, as they may have a realistic image of how many drinks they can safely have before the legal alcohol limit is reached, or when they become impaired. For the majority of leisure users, operations would usually occur in the Open or Specific category, therefore only one limit is required for familiarisation for these users, compared with Option 2 which would have two limits required for familiarisation.

Option 4: Set all limits equivalent to manned aviation (preferred)

35. Set limits aligned with performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the Railways and Transport Safety Act 2003 for all risk categories (Open, Specific and Certified).

36. This option proposes to prescribe in legislation the following specific limits in the proportion of alcohol in the breath, blood or urine of a safety critical person involved with operating unmanned aircraft immediately before, whilst or immediately after flying in each category of operation:

Figure 6: Option 4 proposed limits

Category of operation	Prescribed limits: breath (microgrammes / millilitres)	Prescribed limits: blood (milligrammes / millilitres)	Prescribed limits: urine (milligrammes / millilitres)
Open category	9µg/100ml	20mg/100ml	27mg/100ml
Specific category	9µg/100ml	20mg/100ml	27mg/100ml
Certified category	9µg/100ml	20mg/100ml	27mg/100ml

37. This option was suggested by the majority of respondents who disagreed with the proposed limits during the Future of Flight Regulatory Review 2021. This option aligns with an amendment that was put forward by Lord Whitty [9], supported by Lord Rosser [10], during debates on the progress of the Air Traffic Management and Unmanned Aircraft ("ATMUA") Act 2021. The amendment suggested the same requirements for unmanned aircraft as those that apply to manned aviation, i.e. performing an aviation function (or activity which is ancillary to an aviation function) for the purposes of Part 5 of the RTSA 2003. However, this option may be too stringent for some operations in the Open category, and it could be argued there is disproportionality and disparity between the safe limits of alcohol and the risk of operation between operating a road vehicle and an unmanned aircraft.

38. It could equally be argued that as unmanned aircraft become more and more integrated within our skies, for example as the UK strives towards operating beyond visual line of sight (BVLOS) routinely, that the level of risk when operating in the Open and Specific categories may increase, and any aircraft operating in airspace has the potential to cause harm and damage, therefore supporting a more stringent limit. The familiarisation cost associated with this option is fairly minimal, as there would be one limit to remember which is already a prescribed limit for manned aviation. This option would align prescribed alcohol limits of unmanned aircraft with any future new or novel aircraft that came to market that may be defined as a 'manned aircraft' or other 'aviation function' described within the RTSA 2003, which would have the side benefit of aiding future familiarisation, or not creating disparity in the future. This is the preferred option.

[9] House of Lords 'Air Traffic Management and Unmanned Aircraft Bill', 3 February 2020. Available at: https://publications.parliament.uk/pa/bills/lbill/58-01/010/5801010-II.pdf

[10] Column 1281, Air Traffic Management and Unmanned Aircraft Bill [HL] - Hansard - UK Parliament

Option 5: Distinguish limits between the sub-categories of the Open category

39. The Open category is broken down into three sub-categories, A1, A2 and A3, which provide certain rules for different types of flying. This option could set varying limits for different operations in the Open category and set limits aligned with manned aviation for the Specific and Certified categories. The exact limits for the sub-categories of the Open category have not been considered in detail, but the limits could be a variety of those discussed so far in this DMA.

40. Another example might be to differentiate between leisure and commercial operators flying in the Open category. If there was a differentiation made between the leisure and commercial operations then the former could have a higher limit applied or even no limit, and the latter could have a slightly more stringent limit that was not as low as the Specific and Certified categories. However, this would be inconsistent with the approach in the EU Regulations (Implementing Regulation 2019/947 and Delegated Regulation 2019/945) applicable to unmanned aircraft, and such distinction was removed from existing law when these EU Regulations were retained in UK law at the end of the EU Exit Transition Period.

41. Under Delegated Regulation 2019/945, there is a requirement for unmanned aircraft to be labelled with class markings, which determine which sub-category the unmanned aircraft is allowed to operate in. Therefore, another option could be to base the alcohol limits on class markings. For example, remote pilots of C0 UAS (maximum take-off mass ("MTOM") of less than 250g) and C1 UAS (MTOM of less than 900g) could have no applicable limit, whereas remote pilots of C2 UAS (MTOM of less than 4kg), C3 UAS (MTOM of less than 25kg) and C4 UAS (MTOM of less than 25kg) could all be subject to a limit (maybe the driving limit). This could be seen as a proportionate approach as the MTOM of an unmanned aircraft contributes to the risk of the operation. However, clear messaging would be needed to avoid any confusion for unmanned aircraft users and the police, and this may increase the difficulty for police to enforce.

Police powers

42. Alongside prescribing alcohol limits for unmanned aircraft operation, to enable better enforcement ability, we will give the police:

- The power to administer preliminary tests (breath, impairment, drug) conditional upon reasonable suspicion that the person:
    a. is acting as remote pilot or in a safety critical function while he or she has alcohol or drugs in his or her system;
    b. has been acting as a remote pilot or in a safety critical function while he or she has alcohol or drugs in his or her system and still has alcohol and drugs in his or her system;
    c. is or has been acting as remote pilot or in a safety critical function and has committed an unmanned aircraft offence;
    d. is or has been acting as the remote pilot (or in a safety critical function) of an unmanned aircraft that has been involved in an accident.
- The power to arrest a person without warrant if, as a result of a preliminary test, the constable reasonably suspects that the proportion of alcohol in a person's breath or blood exceeds the prescribed limit.
- The power to arrest a person without warrant if a person fails to co-operate with a requirement to undertake a preliminary test.
- The power to enter any place for the purpose of administer a preliminary test where the constable reasonably suspects that there has been an accident involving an injury to any person.

- The power to require provision of specimens for analysis, subject to the conditions set out in sections 7 and 7A of the RTA 1988.
- The power to detain persons at a police station if the constable has reasonable grounds for believing that, were the person to attempt to fly an unmanned aircraft again, they would be committing an offence of remote piloting while intoxicated (also applicable to those performing a safety critical function).

These powers are equivalent to those in the RTA 1988 which apply in relation to motor vehicles.

Offences and penalties

43. In addition, the new law will create the following offences:

- Acting as a remote pilot, or other persons otherwise critical to the safe use of an unmanned aircraft, while the proportion of alcohol in your system exceeds the prescribed limit
- Acting as a remote pilot, or other persons otherwise critical to the safe use of an unmanned aircraft, while impaired by alcohol
- Acting as a remote pilot, or other persons otherwise critical to the safe use of an unmanned aircraft, while impaired by drugs

44. The penalties associated with these offences in any category of operation will be:

- On summary conviction, a fine not exceeding the statutory maximum; or imprisonment for a term not exceeding twelve months in Great Britain / six months in Northern Ireland (or both)
- On indictment, imprisonment for a term not exceeding two years, a fine or both.

45. These penalties, except the ‘or imprisonment for a term not exceeding twelve months in Great Britain / six months in Northern Ireland (or both)’ for summary conviction, are equivalent to those for manned aviation in the RTSA 2003. The additional custodial sentence option in this instance does not mean the penalties for unmanned aircraft would be more stringent than for manned aviation, but more flexible, putting less pressure on the courts system. A deeper analysis on the impact on the Criminal Justice System from these changes will be carried out through a Justice Impact Test.

2 Rationale for De Minimis Rating

2.1 Costs and Benefits

Option 0 – Do Nothing

46. Under the status quo, it is already an offence to operate unmanned aircraft in the Open or Specific categories of operation under the influence of psychoactive substances or alcohol. However, in the current legislation there are no alcohol limits specifically applicable to remote pilots or any other safety critical person that may be required for the safe use of unmanned aircraft. This lack of clarity poses a risk of unsafe unmanned aircraft use if users of unmanned aircraft are unaware of the current limits in place and therefore operate their aircraft under the influence of alcohol, potentially leading to damage being caused to individuals or property. Police officers are also not currently provided with the power to administer alcohol tests without consent, making it difficult to enforce alcohol related offences. The deterrent against operating unmanned aircraft under the influence of alcohol is therefore diminished, increasing the likelihood of alcohol-related incidents.

All options except for do nothing (Option 0)

47. All options apart from do nothing (Option 0) are considered together in this section as they all involve introducing primary legislation regarding alcohol limits for persons critical to the safe use of unmanned aircraft. By enforcing clear alcohol limits for persons critical to the safe use of unmanned aircraft, we are providing clarity to the regulation and making it easier for the police to enforce. As it is already unlawful to operate unmanned aircraft in the Open and Specific categories of operation under the influence and we are only introducing specific limits, we will not necessarily see a significant impact on the number of alcohol-related offences; therefore impacts on the criminal justice system should be minimal.

48. The appraisal period is 10-years from 2022 to 2031 inclusive, in 2021 prices and 2022 present values. HM Treasury and Ministry of Justice appraisal guidance states that impacts of individuals and organisations that have broken the law should not be counted. Therefore, we do not estimate the costs to businesses for participating in alcohol tests. Instead, we focus on the costs to legitimate business activity, which in this instance is only familiarisation costs for commercial operators and remote pilots of unmanned aircraft. The impact for other stakeholders, including non-commercial operators and/or remote pilots of unmanned aircraft, police, Criminal Justice System and third parties are qualitatively described but not estimated here owing to a lack of data and to keep the analysis proportionate.

Figure 7: Stakeholder impacts key

Colour	Stakeholder Impact
	Negative Net Impact
	Positive Net Impact
	Ambiguous/Neutral Net Impact
	No Impact

Figure 8: Summary of impacts (NQ = Not Quantified)

Impacts	Commercial Operators	Non-Commercial Operators	CAA	Police	Third Parties
Familiarisation Costs	Yes	Yes	Yes - NQ	Yes - NQ	No
Compliance Costs	Yes -NQ	Yes - NQ	No	Yes - NQ	No
Improved Airspace Safety	No	No	No	No	Yes - NQ
Criminal Justice System	No	No	No	Yes - NQ	No

2.2 Summary

49. The monetised costs are as follows:

- Monetised familiarisation costs for commercial operators and remote pilots
- Familiarisation costs to non-commercial operators and remote pilots (estimated but do not count towards EANDCB)

50. The unmonetised costs are as follows:

- Familiarisation costs to the CAA
- Familiarisation costs to the police
- Costs to the police of administering alcohol tests safety critical persons to an unmanned aircraft operation
- Costs to commercial safety critical persons to an unmanned aircraft operation participating in alcohol or drug tests
- Costs to non-commercial safety critical persons to an unmanned aircraft operation participating in alcohol or drug tests
- Costs to the Criminal Justice System

51. The unmonetised benefits are as follows:

- Benefits to third parties from improved airspace safety

2.3. Costs

Familiarisation Costs

Costs to business

52. The cost to businesses of commercial unmanned aircraft safety critical persons familiarising themselves with the new alcohol limits legislation is within the scope of the Expected Annual Net Direct Cost to Business ("EANDCB").

53. To calculate familiarisation costs, we assume that all commercial operators and remote pilots of unmanned aircraft will be required to familiarise themselves with changes in the law. As of April 2022, the number of operational authorisations in the Specific category was 7,000 [11]. This is assumed to be the number of commercial operators as the best available a proxy, although it may overestimate the number of business' as one business might have several operational authorisations in the Specific category if they use unmanned aircraft for multiple purposes, e.g. for delivery and for inspection. It should also be noted that some businesses may operate in the Open category and therefore will not be captured here.

[11] CAA unmanned aircraft registration data, April 2022 (unpublished)

54. As a business only requires one operator license regardless of the number of unmanned aircraft they use, we also consider the number of unmanned aircraft per operator license. In the central scenario we assume 5 remote pilots per operator, using the ratio of drones per operator in 2018 Taking Flight consultation as a proxy[12]. Respondents were generally unsure when forecasting how many drones the average business would use in the future, to capture this uncertainty we have indicatively assumed 1 remote pilot per operator in the low and 10 in the high scenario (based on consultation responses and expert judgement) and tested our assumptions through sensitivity analysis.

55. As per Regulatory Policy Committee ("RPC") guidance [13], gross hourly earnings have been sourced from the 2021 Annual Survey of Hours and Earnings ("ASHE") data for all occupations [14]. As the use of unmanned aircraft for commercial purposes is still in its relatively early stages, we do not have reliable data for the median wage earnt by commercial operators. To represent this uncertainty, we have used the 25th and 75th percentile income in the low (£11.50) and high (£22.52) scenarios. The central scenario has used the median income value (£15.65). An uplift of 26.5% has also been applied to represent non-wage labour costs to businesses, such as national insurance and pension contributions [15].

56. We have taken a proportionate approach for the familiarisation time assumption. As it is already unlawful to fly unmanned aircraft under the influence in the Open and Specific categories and we are only introducing specific limits, we do not anticipate the time needed to read and understand the guidance to be too significant. In absence of knowing how many additional words will be added to the regulations, we have assumed one hour in the central scenario. The low and high scenarios have assumed 30 minutes and two hours respectively.

57. Familiarisation costs are calculated by multiplying the number of commercial unmanned aircraft users by the total labour costs and the length of time taken to read and understand the new regulations. Low and high scenarios account for different reading times, number of drones per business and income levels.

58. Familiarisation costs have only been calculated for the first appraisal year as they are a one-off cost. They are presented below in Figure 9. The total familiarisation costs to business in the central scenario is £693,000. For the low scenario it is £51,000 and for the high £3,988,000.

Figure 9: Familiarisation costs for commercial operators (rounded to the nearest £000)

Scenario	Time	Operators	Unmanned aircraft remote pilots per operator	Hourly wage and non-wage costs	Total Familiarisation costs
Low	0.5 hours	7,000	1	£14.55	£51,000
Central	1 hours	7,000	5	£19.80	£693,000
High	2 hours	7,000	10	£28.49	£3,988,000

[12] DfT "Taking Flight: The Future of Drones in the UK Government Response", January 2019. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937275/future-of-drones-in-uk-consultation-response-web.pdf

[13] RPC 'RPC guidance note on 'implementation costs', August 2019. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/827926/RPC_short_guidance_note_-_Implementation_costs__August_2019.pdf

[14] ONS 'Earnings and hours worked, place of work and residence by local authority: ASHE Tables 7 and 8 : 2021', 1 November 2021. Available at: https://www.ons.gov.uk/datasets/ashe-tables-7-and-8/editions/2021/versions/1

[15] DfT 'Transport Appraisal Guidance: Unit A4.1', May 2022. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1007447/tag-unit-a-4-1.pdf

Familiarisation costs to others

59. Outside of the EANDCB, familiarisation costs are also applicable to leisure unmanned aircraft safety critical persons the CAA as the competent authority of unmanned aircraft and to the police. This section provides indicative costs for leisure operators only to keep the analysis proportionate. These costs are not counted in the Net Present Social Value, Business Net Present Value or EANDCB.

60. Familiarisation costs to leisure users of unmanned aircraft are calculated by multiplying the approximate number of UK drone users by the costs of one hour of leisure and the time taken to read and understand the new regulations. We have therefore assumed that every leisure operator/remote pilot will familiarise themselves with the new regulations. It is worth noting that in practice, it is unlikely that every leisure operator/remote pilot would take the time to read and understand the guidance. Therefore, even the low scenario may slightly overestimate the actual familiarisation costs, although the magnitude of this effect is uncertain. Owing to uncertainty regarding the number of leisure aircraft users, we have used a range across the scenarios. As of April 2022, there were 130,000 people holding an unmanned aircraft Flyer ID only, whilst there were 320,000 users holding an Operator ID, Flyer ID, or both [16]. These figures are in the low and high scenarios respectively, whilst the central scenario uses the midway point of 225,000. We have again used median hourly wage and non-wage costs in the central scenario as this represents an individual's opportunity cost of one hour of leisure time. Low and high scenarios account for the 25th and 75th income percentiles and for different amounts of time taken to read the guidance.

Figure 10: Familiarisation costs for leisure operators (rounded to the nearest £000)

Scenario	Time	Number of operators and/or remote pilots	Hourly wage and non-wage costs	Familiarisation costs
Low	0.5 hours	130,000	£14.55	£946,000
Central	1 hours	225,000	£19.80	£4,454,000
High	2 hours	320,000	£28.49	£18,232,000

61. Although there may be some familiarisation costs to the CAA and some costs for the time taken to update the guidance on its website, we would expect these to involve a very low number of employees, resulting in only a small cost absorbed within existing budgets and staffing levels. It is therefore not proportionate to monetise this cost here.

62. The familiarisation cost to the police has not been monetised as these powers would be communicated to police officers through existing mechanisms. These costs would be small and therefore it would be disproportionate to monetise them. This is the same approach as in the Air Traffic Management and Unmanned Aircraft (ATMUA) Act 2021 impact assessment.

Alcohol Test Costs

63. HMT and MoJ appraisal guidance states that impacts of individuals and organisations that have broken the law should not be counted. Therefore, we do not estimate the costs to businesses for participating in alcohol tests.

[16] CAA unmanned aircraft registration data, April 2022 (unpublished)

64. In some cases, there may be compliance costs to individuals and organisations who are asked to take a test having not broken the law. For individuals, the time taken to complete the test will act as an opportunity cost against their leisure time. For organisations, any time taken could result in a loss of earnings if they otherwise would have been engaging in productive activities. Owing to proportionality and a lack of data, the magnitude of this effect has not been quantified.

65. Again, due to proportionality and a lack of data on the number of alcohol-related unmanned aircraft incidents, the costs to the police of administering alcohol tests have not been monetised in this assessment. Qualitatively, we would expect costs to incur in the form of police officer time, the test kit itself, the required laboratory analysis, and the cost of holding suspects in a police cell if required.

Costs to the Criminal Justice System

66. The introduction of limits and new police powers is not expected to significantly increase the number of offences committed or prosecuted. Clearer regulations specific to unmanned aircraft safety critical persons could reduce imperfect information and may act as a deterrent to flying under the influence of alcohol, resulting in an overall decrease in such incidents. On the other hand, by providing police with clearer guidance and further police powers, there could be an increase in the number of arrests as they will have more enforcement power. Overall, we cannot be sure of the magnitudes of each of these effects. However, we would broadly expect the net effect to be small, so the impact on the Criminal Justice System has not been monetised here and has been qualitatively assessed as no net impact.

2.4 Benefits

Benefits to Third Parties

67. An airprox incident is a situation in which the distance between aircraft, as well as their position and speed, may have compromised their safety. Up to November, in 2021 there were 74 airprox incidents involving unmanned aircraft systems of lower mass [17]. In 2020, there were 69 high-severity Mandatory Occurrence Reports (“MORs”) involving remotely piloted aircraft systems, with 334 occurrences in total [18]. In 2021, over 6,000 incidents involving drones were reported to the police [19]. As the unmanned aircraft market grows, it is likely that the number of incidents will increase, we therefore need to ensure that adequate limits for alcohol are in place to protect operators, remote pilots and the wider public.

68. Introducing clearer regulations on alcohol limits for remote pilots of unmanned aircraft could lead to a safer environment with fewer alcohol-related incidents. The reduced level of risk of operating unmanned aircraft would reduce the probability of a third-party being the victim of injury or property damage as a result of such an incident.

2.5 Sensitivity Analysis

69. By using operators in the Specific category as a proxy for commercial operators, we are potentially missing businesses who may operate in the Open category, although it is unclear

[17] UK Airprox Board ‘UA and Other Airprox Count and Information 2022’, April 2022. Available at: https://www.airproxboard.org.uk/Topical-issues-and-themes/Drones/

[18] CAA ‘CAP2247: UK Annual Safety Review 2020’, 2 September 2021. Available at: https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=10827

[19] National Police Chiefs Council (NPSS) data, 2021 (unpublished)

how many this could be. Due to this lack of robust data, we have conducted sensitivity analysis relating to how many commercial operators would need to operate for familiarisation costs to cause the EANDCB to be at least +/-£5,000,000.

70. In the central scenario, there would need to be approximately 51,000 commercial operators for the threshold to be exceeded. In the low and high scenarios there would need to be 687,000 and 9,000 operators respectively. As the high scenario would require an increase in our proxy for commercial operators of around 25% and a high number of unmanned aircraft remote pilots per operator, we are confident that the EANDCB will not exceed £5,000,000.

Figure 11: Sensitivity analysis

Scenario	Time	Operators	Unmanned Aircraft remote pilots per operator	Hourly wage and non-wage costs	Total Familiarisation costs
Low	0.5 hours	687,000	1	£14.55	£5,000,000
Central	1 hours	51,000	5	£19.80	£5,000,000
High	2 hours	9,000	10	£28.49	£5,000,000

2.6 Risks and unintended consequences

71. There is a relatively high degree of uncertainty in the DMA owing to the lack of data regarding the current number of unmanned aircraft incidents involving alcohol or drugs.

72. In our central scenario we have assumed 5 remote pilots per operator, as per the 2018 Taking Flight Consultation. There is a risk that developments in the sector since then have led to a higher concentration of unmanned aircraft usage within businesses, therefore resulting in more remote pilots per operator. By capturing this uncertainty and assuming 10 drones per operator in our high scenario, and still not exceeding the £5,000,000 EANDCB threshold, we are confident that this risk has been mitigated.

73. Due to a lack of data, we are unsure if this intervention will lead to a net change in the number of prosecutions. On one hand, improving legal clarity could reduce imperfect information and act as a deterrent towards flying under the influence of alcohol or drugs. On the other hand, improving clarity and enforceability could lead to an increase in the number of arrests and prosecutions.

74. There is also a risk that this legislation creates a disproportionate burden on police to enforce it, depending on the number of potential offences. In designing this policy, we have engaged with several representatives from the police and Ministry of Justice, who showed support for Option 4, our preferred option, from both a safety and enforcement perspective.

75. In terms of unintended consequences, using the same alcohol limits as for manned aviation could be disproportionate for unmanned aircraft of a lower Maximum Take-Off Mass. This could potentially hinder the growth of the unmanned aircraft market if the legislation is overly prescriptive and subsequently reduces demand. However, the measures do not limit the different usage of unmanned aircraft, but ensure that the regulation is robust enough for police to effectively enforce regulation. The intention is to not stifle innovation, but drive a more cultural change of using unmanned aircraft safely, which in turn will help the market to develop.

2.7 Wider impacts

Small and Micro Businesses Assessment

76. Small and Micro Businesses ("SMBs") make up 95% of UK businesses and account for around 39% of employment and 14% of turnover [20]. They often cite regulation as a key barrier to growth, and regulation can disproportionality affect them.

77. The CAA do not capture information on the size of organisations using unmanned aircraft, although they do publish a list of approved commercial unmanned aircraft operators which, following the removal of the need to distinguish between commercial and non-commercial operations in the ANO 2016 (as a consequence of the IR becoming applicable), should only include those unmanned aircraft operators required to seek some sort of authorisation from them i.e. those operating in the Specific and Certified categories. From our knowledge of the sector, we believe that a sizeable proportion of businesses are small or micro sized. Large companies and organisations are also known to be using unmanned aircraft, such as Network Rail [21].

78. This measure could in theory impact Small and Micro Businesses disproportionately if, in cases where no offence has been committed and a commercial unmanned aircraft safety critical person is asked to take an alcohol test, a disproportionate loss of earnings is caused. However, we wouldn't expect these cases to happen enough times per unmanned aircraft safety critical person for a significant impact to be felt.

Justice Impact Test

79. As it is already unlawful to fly intoxicated in the Open and Specific categories we do not expect to see a significant impact on the number of alcohol-related offences. Therefore, we expect impacts on the criminal justice system to be minimal. Clearer regulations specific to unmanned aircraft operators could reduce imperfect information and may act as a deterrent to flying under the influence of alcohol, resulting in an overall decrease in such incidents. On the other hand, by providing police with clearer guidance, there could be an increase in the number of arrests as they will have more enforcement power. Overall, we cannot be sure of the magnitudes of each of these effects.

80. A Justice Impact Test for these new alcohol and drugs measures will be completed.

Equalities Impact Assessment

81. Evidence collected by the Home Office shows that in the year ending March 2018, those who considered themselves to be from BME groups were 4 times as likely to be stopped and searched than those who considered themselves to be White, and in the year ending March 2019, the differential was 4.3 times as likely [22]. However, this measure is not expected to impact any particular group in a discriminatory or unfair way. The new police powers will be used proportionately by police and are limited, including that a police constable has reasonable suspicion that a relevant offence has taken, or is taking place, or to enter any place only when the constable reasonably suspects there has been an accident

[20] House of Commons 'Business Statistics', 21 December 2021. Available at: https://commonslibrary.parliament.uk/research-briefings/sn06152/#:~:text=75%25%20of%20UK%20businesses%20had,employment%20and%2014%25%20of%20turnover

[21] Network Rail 'Drones or Unmanned Aircraft Systems (UAS)', accessed 15 June 2022. Available at: https://www.networkrail.co.uk/running-the-railway/looking-after-the-railway/our-fleet-machines-and-vehicles/air-operations/drones-or-unmanned-aircraft-systems-uas/

[22] Home Office 'Police powers and procedures, England and Wales, year ending 31 March 2018', 25 October 2018. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/751215/Police-powers-procedures-mar18-hosb2418.pdf

involving an injury to any person. A full Equalities Impact Assessment will be carried out for these measures.

Trade Impact

82. As it is already unlawful to fly intoxicated in the Open and Specific categories, we do not expect the introduction of alcohol limits to impact the demand or supply for unmanned aircraft. We therefore do not expect this measure to have an impact on trade.

3 Post implementation review

83. No review clause is expected to be included in the primary legislation. In the meantime, this policy will be reviewed on a continual basis to ensure that it is fit for purpose, keeps pace with the advancements in the unmanned aircraft market and is being effectively implemented by the police to achieve the policy objectives set out above. This is in line with DfT's current approach to monitoring the health of the UK drone sector and the impact of HMG's legislative and fiscal policies on the sector. For example, we will continue to monitor regular data sources, such as from the CAA's Drones and Model Aircraft Registration and Education Scheme ("DMARES"), and engage with the NPCC and Future of Flight Industry Group as announced in the Flightpath to the Future strategic framework [23].

[23] DfT 'Flightpath to the Future', 26 May 2022. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1079042/flightpath-to-the-future.pdf