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<b>Title:</b> Summary Impact Assessment for Air Navigation Order 2016 <b>IA No: DFT00345/DFT00349</b> <b>Lead department or agency:</b> Civil Aviation Authority <b>Other departments or agencies:</b> Department for Transport	<b>Impact Assessment (IA)</b>				
	<b>Date:</b> 29/06/2016				
	<b>Stage:</b> Final				
	<b>Source of intervention:</b> Domestic				
	<b>Type of measure:</b> Secondary legislation				
	<b>Contact for enquiries:</b> Mark Shortman, CAA mark.shortman@caa.co.uk 01293 768645				

<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b> EANCB Validated
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Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2014 prices)	In scope of One-In, Three-Out?	Measure qualifies as
£24.07m	£2.95m	£-0.33m	Yes	OUT

**What is the problem under consideration? Why is government intervention necessary?**

This is a Summary cover sheet for the individual Impact Assessments (IAs) for the measures that together form the Air Navigation Order (ANO) review 2016. This was driven in response to the Government's General Aviation (GA) Red Tape Challenge, with a view to making it more proportionate and less burdensome. This IA summarises three broad policy changes, all of which are reducing the regulatory burden on the GA industry:

1. General Aviation – Air Navigation Order review
2. UK NPPL / UK PPL Medical Self Declaration
3. Development & operation of experimental aircraft (E Conditions): Note that the savings from this measure have not yet been validated, and therefore have not been included in this summary.

**What are the policy objectives and the intended effects?**

We wish to remove unnecessary burdens to help create a larger and more dynamic GA sector, while maintaining a high standard of aviation safety.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

The preferred options in the three broad policy areas are:

1. GA ANO review: Amend the provision to meet policy objectives. This includes a number of smaller measures designed to make it easier to understand and comply with the ANO. We believe it will remove burdens without affecting safety.
2. UK NPPL/UK PPL Medical Self Declaration: Amend the ANO to allow GA pilots to self-declare their fitness-to-fly without the requirement to attend a medical examination/consultation.
3. Development & operation of experimental aircraft: Amend the ANO to reduce the regulatory burdens on developing and experimentally operating new light aircraft. We believe this will incentivise innovation without affecting safety.

<b>Will the policy be reviewed?</b> It will not be reviewed. <b>If applicable, set review date:</b> Month/Year					
Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> N/A	<b>Non-traded:</b> N/a	

***I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.***

Signed by the responsible Minister: \_\_\_\_\_ Robert Goodwill \_\_\_\_\_ Date: \_\_\_\_\_ 06/07/2016 \_\_\_\_\_

## Summary: Analysis & Evidence

## Preferred Policy Option

**Description:** Summary Impact Assessment for Air Navigation Order 2016

### FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 12.20	High: 42.81	Best Estimate: 24.07

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.0	0.1	0.5
High	0.0	0.3	3.0
Best Estimate	0.0	0.1	1.3

#### Description and scale of key monetised costs by 'main affected groups'

These are defined in the individual IAs. The summary figures in this Analysis & Evidence section reflect those from the preferred option from each IA. This excludes the E conditions IA.

Key changes are transitional costs as GA industry and pilots familiarise themselves with new regulations and update their training material. Cost to CAA of changing systems and procedures, and producing the Skyway Code.

#### Other key non-monetised costs by 'main affected groups'

These are defined in the individual IAs.

For the Medical Self Declaration, we have not monetised any additional costs to pilots from having to prove relevant exemption from medical examination.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	1.8	15.2
High	0.0	5.1	43.3
Best Estimate	0.0	3.0	25.3

#### Description and scale of key monetised benefits by 'main affected groups'

These are defined in the individual IAs. The summary figures in this Benefits section reflect those from the preferred option from each IA, with the exception of the E Conditions IA.

Reduced costs to industry and pilots in understanding the ANO, and pilots in maintaining their licence ratings. Benefits to private pilots and flying instructors from not having to undertake regular medical assessments.

#### Other key non-monetised benefits by 'main affected groups'

These are defined in the individual IAs.

We have not monetised the reduced costs to businesses from applying for less burdensome Special Category Certificate of Airworthiness (CofA), rather than ICAO compliant CofA.

Key assumptions/sensitivities/risks	<b>Discount rate</b>	3.5%
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We focus primarily on protecting third-parties from risks associated with GA activities, while enabling GA participants to manage their own risks. We do not consider that the changes will lead to any reduction in the level of safety

Where appropriate, we have used standard assumptions from relevant WebTAG and Green Book guidance.

### BUSINESS ASSESSMENT (Preferred Option)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>In scope of OITO?</b>	<b>Measure qualifies as</b>
Costs: 0.0	Benefits: 0.4	Net: 0.3	Yes	OUT

## **DESCRIPTION**

### **1 General background**

General Aviation (GA) is all civil aviation operations other than scheduled air services and non-scheduled passenger or cargo flights, and excludes military aviation. GA aircraft range from gliders, to microlights, to helicopters, to corporate business jets. GA covers a large range of activities both commercial and non-commercial, including flying clubs, flight training, agricultural aviation, light aircraft manufacturing and maintenance.

Responses to the Red Tape Challenge found that the UK GA sector was under increasing strain as costs of operation had risen due to fiscal pressures, a greater focus on environmental issues, the application of a European regulatory framework, and perceived over regulation by the CAA. Too much prescription in the rules and a lack of proportionality have both impacted adversely on the sector. In response to these findings, we set up a new GA Unit to focus on the sector and to ensure that the regulatory regime for GA would take a different path and be less onerous than that applied to the commercial aviation sector.

In our GA policy framework, we have developed the following four principles that guide our approach to GA:

- a) only regulate directly when necessary and do so proportionately;
- b) deregulate where we can;
- c) do not gold-plate, and quickly and efficiently remove gold-plating that already exists; and
- d) help create a vibrant and dynamic GA sector in the UK.

In our review of the ANO principles a, b and d have had particular importance.

### **2 Purpose of this Summary IA**

This summary cover sheet brings together the three individual IAs that together encompass the changes within the ANO review 2016.

Two IAs are attached to this summary:

#### **1. General Aviation – Air Navigation Order review: RPC Validated, RPC-DfT-3271**

Some of the key changes being proposed are:

- Align domestic definitions with the EASA regulations to ensure aircraft and pilots in each area are fairly and equally treated.
- Consistency of Maintaining licence ratings.
- Allow use of permit aircraft for commercial operations.
- Allow UK registered aircraft to be owned by non-EEA citizens.
- Allow Permit to Fly aircraft to utilise experimental categories (A Conditions).
- Revising flight time limitations to allow pilots to judge their fitness to fly.
- Allow the Police to engage certain organisations to assist them without the high regulation of having to hold a police air operators certificate (PAOC).
- Allow un-licensed aerodromes to accept aircraft up to 5,700kg.
- Align pilot owner maintenance with that permitted to an EASA aircraft.
- Allow instruction by foreign trained instructors to teach in a UK registered aircraft.

#### **2. UK NPPL / UK PPL Medical Self Declaration: RPC Validated, RPC-3320(1)-DfT**

The key changes here is to allow pilots that hold an UK NPPL or an UK PPL to assess their own medical fitness to fly and make a self declaration to that effect, removing the routine requirement to attend a medical assessment. The proposal is in line with the CAA's approach to GA, to make

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the regulation of recreational flying more proportionate and less burdensome, while protecting third parties.

The figures from these two are brought together in the front page of this Summary IA.

There is a third area of change within the ANO 2016, however the monetised costs and benefits of that measure have not yet been validated by the Regulatory Policy Committee:

1. Development & operation of experimental aircraft (E Conditions): RPC not validated, RPC-DfT-3358(1).

The key change here is to facilitate the design and testing of experimental aircraft under E Conditions as a means to fly an experimental prototype or modified aircraft in order to test a concept in the air without having to obtain a formal approval from the CAA, such as a CofA or a PtoF. This will incentivise innovation without affecting safety.

As this is a *deregulatory* change that is very much being welcomed by industry, the changes are still being taken forward within the ANO 2016. It should be noted that the figures from this are *not* included in the Summary IA and the IA itself is not attached to this summary. The IA for the E Conditions will be re-submitted to the RPC later this year and, once validated, this Summary IA will be updated to include it.

### **3 Impact of E-Conditions IA**

The concept of E Conditions was created in association with the Royal Aeronautical Society (RAeS) as being a cost effective way to incentivise innovation without affecting safety.

This is a deregulatory change.

E Conditions will allow designers and innovators of modifications and new aircraft to fly a proof of concept aircraft under the oversight of a suitably qualified person (called a “competent person”) rather than having to obtain a formal approval from the CAA. This is seen as reducing the time of the experimental phase of bringing something to market and removing the regulatory costs involved in experimentation. The GA community welcome this change and projects that would otherwise not have progressed are now being taken forward. Also, projects that due to cost and timescale, would previously have been tested and developed abroad, are now being cited to be performed in the UK.

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<b>Title:</b> General Aviation – Air Navigation Order Review <b>IA No:</b> <b>Lead department or agency:</b> Civil Aviation Authority <b>Other departments or agencies:</b> Department for Transport	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 14/12/2015		
	<b>Stage:</b> Final		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Secondary legislation		
	<b>Contact for enquiries:</b> Mark Shortman, CAA mark.shortman@caa.co.uk 01293 768645		

<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b> EANCB Validated
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Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2014 prices)	In scope of One-In, Two-Out? Measure qualifies as
£15.03m	£1.97m	£-0.22m	Yes   OUT

**What is the problem under consideration? Why is government intervention necessary?**

In response to the Government's General Aviation (GA) Red Tape Challenge, we conducted a fundamental review of our approach to the regulation of GA, with a view to making it more proportionate and less burdensome. The legal foundation for our regulation of GA is the Air Navigation Order (ANO). We are amending the ANO to reduce burdens on private pilots and the industry. We regulate to protect the safety of passengers carried by GA, other users of airspace, including commercial air transport, and the general public on the ground. We are subject to European aviation safety regulation so we could not completely deregulate the sector if we thought that would be appropriate.

**What are the policy objectives and the intended effects?**

We wish to remove unnecessary burdens to help create a larger and more dynamic GA sector, while maintaining a high standard of aviation safety.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

There are many different provisions in the ANO each of which has been considered on their own merits independent of the other provisions. For the provisions there are two options:

Do nothing (baseline option): Do not amend the provisions of the ANO.

Policy Option One (Preferred): Amend the provision to meet policy objectives. This is the preferred option as we believe it will remove burdens without affecting safety

<b>Will the policy be reviewed?</b> It will not be reviewed. <b>If applicable, set review date:</b> Month/Year					
Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b> N/A	<b>Non-traded:</b> N/a	

***I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.***

Signed by the responsible SELECT SIGNATORY: \_\_\_\_\_ Date: \_\_\_\_\_

## Summary: Analysis & Evidence

Policy Option 1

Description: Amend the Air Navigation Order (ANO) Provisions

### FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 5.70	High: 31.22	Best Estimate: 15.03

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.0	0.1	0.5
High	0.0	0.3	3.0
Best Estimate	0.0	0.1	1.3

#### Description and scale of key monetised costs by 'main affected groups'

Transition costs to private pilots from familiarising themselves with the revised ANO.  
 Transition costs to the GA industry from familiarising themselves with the revised ANO and amending training materials.  
 Costs to CAA from production of the Skyway Code.

#### Other key non-monetised costs by 'main affected groups'

No additional non-monetised costs.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	1.0	8.7
High	0.0	3.8	31.7
Best Estimate	0.0	1.9	16.3

#### Description and scale of key monetised benefits by 'main affected groups'

Reduced costs to industry of understanding the ANO and explaining it to their customers.  
 Reduced costs to private pilots of understanding the ANO.  
 Reduced costs to private pilots to maintain their licence rating.  
 Reduced costs to trainee pilots.

#### Other key non-monetised benefits by 'main affected groups'

Reduced costs to businesses from applying for less burdensome Special Category Certificate of Airworthiness (CofA), rather than ICAO compliant CofA.

Key assumptions/sensitivities/risks

Discount rate

3.5%

We focus primarily on protecting third-parties from risks associated with GA activities, while enabling GA participants to manage their own risks. We do not consider that the changes will lead to any reduction in the level of safety. We have not been able to monetise potential benefits from opportunities for more flying and new business opportunities. We have based our figures on the current level of GA activity.

### BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0.0	Benefits: 03	Net: 0.2	Yes	OUT

## **EVIDENCE BASE**

### **1 Problem under consideration**

General Aviation (GA) is all civil aviation operations other than scheduled air services and non-scheduled passenger or cargo flights. GA aircraft range from gliders, to microlights, to helicopters, to corporate business jets. GA covers a large range of activities both commercial and non-commercial, including flying clubs, flight training, agricultural aviation, light aircraft manufacturing and maintenance.

Of the 19,000 civil aircraft registered in the UK, 96% are engaged in GA. There are about 25,000 licensed private pilots (out of 50,000 overall) and about 10,000 glider pilots. GA operates from more than 1,800 aerodromes ranging from large commercial airports to farm strips, most of these are unlicensed. About 96% of aviation organisations fall below the 250 employee limit.

About 50% of GA aircraft in the UK are regulated by the European Aviation Safety Authority (EASA). Other aircraft are subject to UK domestic legislation. The Civil Aviation Authority (CAA) is responsible for regulating aviation safety in the UK. The Air Navigation Order (ANO) is the legal vehicle by which we enforce both EASA and UK domestic regulation.

Responses to the Red Tape Challenge found that the UK GA sector was under increasing strain as costs of operation had risen due to fiscal pressures, a greater focus on environmental issues, the application of a European regulatory framework, and perceived over regulation by the CAA. Too much prescription in the rules and a lack of proportionality have both impacted adversely on the sector. In response to these findings, we set up a new GA Unit to focus on the sector and to ensure that the regulatory regime for GA would take a different path and be less onerous than that applied to the commercial aviation sector.

The proposals are to reduce the amount of prescription in the rules.

### **2 Rationale for intervention**

We regulate to protect the safety of passengers carried by GA, other users of airspace, including commercial air transport, and people on the ground. As GA is subject to European safety regulation we could not completely deregulate the sector even if we thought that would be appropriate.

In our GA policy framework, we have developed the following four principles that guide our approach to GA:

- e) only regulate directly when necessary and do so proportionately;
- f) deregulate where we can;
- g) do not gold-plate, and quickly and efficiently remove gold-plating that already exists; and
- h) help create a vibrant and dynamic GA sector in the UK.

In our review of the ANO principles a, b and d have had particular importance.

Our policy framework also sets out our approach to regulating safety, we seek to allow GA pilots to make informed decisions about the risks involved in their activity, while minimising the safety risks to third parties, whether they be passengers in GA aircraft, commercial air operators or people on the ground.

### **3 Policy objectives**

The proposals are designed to:

- reduce the regulatory burden;
- maintain the current high standard of safety and culture of compliance; and
- continue compliance with EU legislation.

## **4 Options**

The ANO is wide ranging covering a number of different aspects of the regulation of GA. Consequently, our review of the ANO includes proposals for changing a number of its provisions. We have considered the impact of each individual proposal to produce a consolidated assessment of the impact of the proposals.

For each individual proposal we have considered two options:

Option 0 – do nothing

Option 1 – change the ANO as proposed.

## **5 Costs and benefits of each proposal**

The proposal is to amend a number of the provisions of the ANO. We consulted on the proposals twice, initially in March 2015 and on more detailed proposals in September 2015. There were a number of survey questions in the first consultation that asked whether specific proposals would benefit the respondents financially. We discuss each proposed amendment individually below. Costs and benefits will accrue to both businesses and private pilots. The proposals have been divided into three sections:

1. those for which we can estimate monetised impacts;
2. those which we expect will lead to an increase in the GA market, but for which we cannot monetise the impact; and
3. those which remove restrictions but we expect will have little material impact.

### **5.1 Proposals for which we can estimate monetised impacts**

**5.1.1 Proposal 1 – Alignment with EASA definitions** The definitions of types of aircraft and activity differ in EASA legislation from the definitions in domestic regulation. We propose to amend the definitions in the ANO to align them with EASA definitions. This will mean that traditional UK definitions such as ‘private’ and ‘aerial work’ will be replaced by EASA terms ‘non-commercial’ and ‘commercial’. As under the proposal, all aircraft (whether subject to EASA or domestic regulation) will be classified in the same way, the scope of regulation should be clearer for pilots and those working in the GA sector.

**5.1.2 Proposal 2 – Alignment with EASA rules** As well as aligning definitions, we also propose to align the substantive operational rules and requirements for aircraft subject to domestic regulation to the rules for aircraft subject to EASA regulation, provided this would not impose additional burdens of compliance.

To complement this we propose to produce a ‘Skyway code’ which would present the regulations in an easy to understand way (as opposed to the legal wording required in the ANO) supplemented by additional guidance material. The aim of the code is to provide a practical guide to safe GA flying which highlights key rules and regulations. It would extract relevant regulations from different pieces of legislation and put them together in one place.

Taking proposals 1 and 2 together; aligning the definitions and operational rules for EASA and domestic regulation, with the introduction of a Skyway Code, we expect there will be a net benefit to private pilots and business. There will be costs from the production of the Skyway Code and one-off costs from pilots and businesses making themselves aware of the changes in regulations. However, we expect these to be more than covered by the ongoing benefits of time saved by having simpler regulation (one set of rules rather than two) and all the regulations written in clear, non-legalistic language, along with guidance material in the Skyway Code. Our estimates of the impact are below:

#### **Skyway Code**



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We estimate that the Skyway Code will take from about 200 hours to 500 hours to write, with a best estimate of 400 hours. The work will mainly be carried out by a Senior Regulatory Policy Adviser at a charge out rate of £80 per hour. On top of this we estimate it will cost £20,000 for an IT company to ensure that the Code has the required functionality to allow it to be searchable by pilots on a variety of devices (smartphone, tablet and computer). We have assumed that there will be no charge for a digital copy of the Code. We have also assumed that most pilots and businesses will use the digital version of the Code so we have not included any costs for a hard copy version. We have assumed that about 60 hours of work by a Senior Regulatory Policy Adviser will be required in year 1 to amend the Code in response to feedback from pilots on its clarity and usefulness. We expect that future amendments to the Code will result from changes in Regulations and that the cost of those amendments should be included in the impact assessment for the change in regulations rather than in this assessment.

The best estimate of the total cost of producing the Skyway Code is £52,000 in year 0 and £4,800 in year 1. We have not included any cost in future years. We have assumed that 15% of the costs of the Skyway Code will be recovered from private pilots and 85% of the costs will be recovered from business. This is in line with the current proportions of the CAA's safety regulation costs recovered from individuals and business.

### Impact on private pilots

In response to our first consultation, stakeholders' estimates of time spent checking regulatory requirements varied enormously from none or a few hours per year to 75% of the working week. As there was no clear single answer, we have estimated a range of the time private pilots spend checking regulatory requirements. We have a low estimate of 6 hours per year, a high estimate of 20 hours per year and a best estimate of 10 hours per year.

In response to a question in our first consultation, 86% of respondents said that proposal 1 would save them time in understanding the regulatory requirements and (for those who work for businesses) in explaining them to their customers. Respondents thought the saving was hard to quantify.

51% of respondents to a question in the first consultation thought that aligning EASA and domestic regulations (as in proposal 2) would affect them financially. Examples of expected savings included from: reduced time and money on overcomplicated maintenance and paperwork; less time spent on checking multiple documents for compliance; and reduced administration and confusion. Respondents found it hard to quantify the effects. Estimated savings included about half a day a week, estimated at about £500 to £2,500 per annum. In contrast, one respondent mentioned one-off costs associated with information and process changes, while a few commented that compliance with EASA rules was expensive.

Equally respondents' views on how much of this time could be saved if there was a Skyway Code varied enormously. The most common response was about 50%. Taking this together with respondents' expectations on proposals 1 and 2, we have estimated a range for the proportionate reduction in the time private pilots spend checking regulatory requirements. Our best estimate is 55%, which reflects a 50% time saving from the Skyway Code plus an additional 5% saving from proposals 1 and 2. We have used a low estimate of 40% and a high estimate of 60%. These estimates were included in our second consultation and were not challenged by respondents.

Combining these figures with the range for the amount of time private pilots spend checking regulatory requirements, we have time a range of time savings of: low estimate 2.4 hours, high estimate 12 hours, best estimate 5.5 hours. Using a cost of leisure time, taken from Government webTAG guidance, of £7.17 per hour in 2016 (at 2015 prices) increased in line with GDP per capita to £8.41 in 2025, and an estimate of 25,000 private pilots gives us the following range of average cost savings per year:

low estimate £430,445  
high estimate £2,152,225  
best estimate £986,436

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We have no reliable estimates for how long private pilots will spend familiarising themselves with the amended requirements. Given this we have assumed that this one off cost in year 0 will be equal to the time saving that arises from proposals 1 and 2 and the production of the Skyway Code. We consider that all familiarisation costs will occur in year 0.

Taking the production costs of the Skyway Code and familiarisation costs with the benefits of less time spent checking regulatory requirements, our range of estimates for the impact of proposals 1 and 2 and the introduction of the Skyway Code on private pilots are shown below.

**Table 1 – Impact on private pilots per year – best estimate, 2015 prices (non-discounted)**

Year	Skyway Code costs	Familiarisation costs	Benefits from time saving	Net benefits
0	7,800	986,436	0	-994,236
1	720	0	1,004,149	1,003,429
2	0	0	1,021,474	1,021,474
3	0	0	1,038,268	1,038,268
4	0	0	1,055,538	1,055,538
5	0	0	1,074,208	1,074,208
6	0	0	1,093,347	1,093,347
7	0	0	1,112,983	1,112,983
8	0	0	1,134,247	1,134,247
9	0	0	1,156,100	1,156,100
<b>Total</b>	<b>8,520</b>	<b>986,436</b>	<b>9,690,314</b>	<b>8,695,358</b>

**Table2 – Ranges for impact on private pilots over the ten year appraisal period, 2015 prices (non-discounted)**

Low estimate	£3,791,936
High estimate	£18,980,559
Best estimate	£8,695,358

### Impact on business

Prior to the first consultation, we asked three GA businesses to estimate the amount of time they spent reviewing regulatory compliance. These businesses are:

- a maintenance and continuing airworthiness management organisation that maintains a variety of GA aircraft from light aircraft to midsized corporate jets;
- a type design organisation providing continuing airworthiness support; and
- an EASA and CAA certified maintenance organisation, maintaining a variety of EASA and non-EASA light aircraft.

Each of these businesses is a small business with none employing more than 20 people.

- The continuing airworthiness maintenance organisation spent about two hours per week reviewing various regulations, including the ANO. It also spent about two hours reviewing and assimilating a substantive change to the regulations.

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- The type design organisation spent about half an hour per week on the ANO, and often more time explaining the regulations to customers.
- The certified maintenance organisation spent about an hour a day on regulatory compliance, although referring to the ANO is relatively rare, except when checking an aircraft's compliance with equipage requirements. The latter might occur several times per month.

We have used these estimates of time spent as our estimates of time spent by GA maintenance businesses on checking regulatory compliance. Converting the figures above into annual hours, with 52 weeks and 260 working days per year, our low estimate is 26 hours a year, our high estimate is 260 hours per year and our best estimate is 104 hours per year.

As the GA industry consists of a number of disparate firms we did not consider that it would be proportionate to contact more businesses, as we would have had to approach many more firms to be sure that our sample would be more representative of the industry as a whole. Consequently, there is a large range in our estimates above.

We have not included any time savings for other GA businesses from proposals 1, 2 and the Skyway Code, such as flying schools and GA aerodromes. We consider they spend much less time than maintenance organisations in checking regulatory requirements, and that any time saving may be immaterial.

We have assumed that maintenance organisations will have a better understanding of regulations than private pilots so we have assumed that their proportionate time savings from proposals 1 and 2 (including the Skyway Code) are lower than those of private pilots. We have assumed a low estimate of 30%, a high estimate of 50% and a best estimate of 40%.

Combining these figures with the range for the amount of time businesses spend checking regulatory requirements, we have time a range of time savings of: low estimate 8 hours, high estimate 130 hours, best estimate 42 hours. We estimate that a certificated GA maintenance engineer would earn about £30,000 to £40,000 per year. For our calculations we have used an average annual salary of £35,000, with an average charge out rate of £22 per hour in 2016 (2015 prices) increased in line with GDP per capita to £26.50 in 2025. We estimate that there are 250 to 300 GA maintenance organisations in the UK. For our calculations we have used a figure of 275. Applying the estimated cost saving per business to the estimated number of businesses gives us the following cost savings (average per year).

	<b>Total impact</b>
Low estimate	£48,400
High estimate	£786,500
Best estimate	£254,100

We have no reliable estimates for how long maintenance organisations on average will spend familiarising themselves with the amended requirements. Given this we have assumed that this one off cost in year 0 will be equal to the time saving that arises from proposals 1 and 2 and the production of the Skyway Code. We consider that all familiarisation costs will occur in year 0.

Taking the production costs of the Skyway Code and familiarisation costs with the benefits of less time spent checking regulatory requirements. Our range of estimates for the impact of proposals 1 and 2 and the introduction of the Skyway Code on business are shown below.

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**Table 3 – Impact on business per year – best estimate, 2015 prices (non-discounted)**

<b>Year</b>	<b>Skyway Code costs</b>	<b>Familiarisation costs</b>	<b>Benefits from time saving</b>	<b>Net benefit</b>
0	44,200	254,100	0	-298,300
1	4,080	0	258,663	254,583
2	0	0	265,650	265,650
3	0	0	270,018	270,018
4	0	0	277,200	277,200
5	0	0	282,103	282,103
6	0	0	288,750	288,750
7	0	0	293,936	293,936
8	0	0	300,300	300,300
9	0	0	306,086	306,086
<b>Total</b>	<b>48,280</b>	<b>254,100</b>	<b>2,542,705</b>	<b>2,240,325</b>

**Table 4 – Ranges for impact on business per year over the ten year appraisal period, 2015 prices (non-discounted)**

Low estimate	£401,245
High estimate	£7,028,697
Best estimate	£2,240,325

A number of respondents to the consultations thought that proposal 2 could lead to opportunities for them to expand their businesses. Examples given included:

- increased aerial survey work, if more aircraft types were allowed to be used; and
- more flight training, if cheaper aircraft were allowed to be used.

We have not been able to monetise these benefits.

**5.1.3 Proposal 3 Private pilot's licence (PPL)** We propose to allow a national UK PPL holder to maintain their Single Engine Piston (SEP) rating using a microlight aircraft. The cost of running a microlight is cheaper than a more traditional single engine aircraft. To maintain the licence a pilot will need to fly 12 hours in a 24 month period. The comparable costs result in a potential saving of between £1,000 and £1,500 by using a microlight.

This would only be of significant benefit to PPL holders who primarily fly nationally regulated aircraft, because the equivalent change in European regulation has not yet been made. While there are at least 14,000 national UK PPL licence holders that could benefit from this change, many will not be using their UK PPL licence regularly and will primarily be using their European (EASA) PPL to fly aircraft regulated by European rules. In view of this, our expectation is that in practice, about 1,000 of these pilots would benefit from this change, resulting in a cost saving over 24 months of between £1m to £1.5m. (That is  $1,000 \times £1,000 = £1m$  to  $1,000 \times £1,500 = £1.5m$ . This results in a cost saving of between £500,000 to £750,000 per year. We have used a best estimate of £625,000 per year.

As this proposal benefits pilots who only fly a few hours per annum in a single engine aircraft, we do not expect it to produce benefits for business.

#### **5.1.4 Proposal 4 (ANO Articles 23) – Use of permit aircraft for commercial operations**

Most aircraft hold a Certificate of Airworthiness (CofA) showing that they meet safety standards set down by the International Civil Aviation Organisation (ICAO). However, some aircraft that do not qualify for a CofA can also be safe to fly in certain conditions. We may issue a Permit to Fly (PtoF) to these aircraft subject to them satisfying these conditions. Most PtoF aircraft are ex-military, amateur built, microlights, gyroplanes, or without a valid type certificate.

Currently PtoF aircraft can be used for flight training where the trainee is an owner or co-owner of the aircraft. This is consistent with the principle that those who understand, and are able to control, their risks, should be allowed to do so. What requires more consideration is the question of whether such aircraft could be used for ab initio flight training, when the trainee is a customer of a flight school.

In 2008, we analysed the safety performance of typical light single engine PtoF aircraft. We concluded there was little appreciable difference in the risk to third parties on the ground between aircraft on a permit, and those on a CofA. Therefore, we consider there would not appear to be overriding safety reasons prohibiting ab initio flight training in permit aircraft.

Before we undertook the first consultation we asked three GA firms whether they saw potential benefits in allowing PtoF aircraft, to conduct remunerated operations, such as flight training. They were reluctant to put a value on the size of the market for such aircraft without knowing the scope of the proposal, but one noted that it could allow flying schools to re-equip with newer aircraft that were half the price of newly certificated aircraft. We would expect this cost reduction to reduce the cost of flight training and grow the market. In particular, we consider that removing some of the restrictions on aircraft that can be used for flight training would reduce the cost of such training leading to more training taking place. This could lead to current training organisations flying more hours, possible new training organisations being established, and more pilots being trained.

Respondents to the consultations had mixed views on this proposal. Many of them thought there would be benefits, which would lead to increased flight training. Positive comments include:

- an increase in annual instructional hours by 30%;
- a £20-£30 per hour cost saving could be achieved;
- an expected increase in business of about £40,000 per year (about 25%);
- would expand and offer light aircraft training and conversion, employing an extra instructor;
- doing 10-20% more training;
- lower maintenance costs and costs of operation; and
- enable more training by greatly reducing costs;

Some existing flight training schools made negative comments, as they considered that their businesses would be compromised by new competitors using cheaper PtoF aircraft. We recognise that some schools have invested in CofA aircraft for flight training which may have a lower value once PtoF aircraft are allowed to be used for flight training.

It is clear that this proposal could reduce flying school costs by allowing them to use aircraft for flight training that they are currently not allowed to use. A number of respondents thought this would lead to significant opportunities for them to expand their businesses by being able to offer cheaper training than they can at present. This could bring significant benefits to private pilots and may lead to more people flying for leisure purposes. However, a number of existing flying schools regarded that their businesses could be adversely affected as they may not be able to continue to offer customers a competitive price by using their current aircraft.

Currently about 1,500 new pilots are trained per year. As it will take time for those training schools who want to equip themselves with PtoF aircraft and there are fewer PtoF than CofA aircraft, our conservative estimate is that about 5% of them (that is 75) will save money from training on PtF

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aircraft. As well as a best estimate of 75 pilots, we also have a high estimate of 100 pilots and a low estimate of 50 pilots benefitting. Taking a conservative view on figures in the responses, we consider that trainee pilots would save about £20 per hour using PtoF aircraft and that they fly an average of 50 hours during training. We, therefore consider that each trainee pilot would save about £1,000 over the course of their initial training. Our estimates of the annual benefits are therefore:

Low estimate	£50,000
High estimate	£100,000
Best estimate	£75,000

We have no accurate estimates of how much of these cost savings will be passed on to trainee pilots and how much will be retained by business through higher profits. As there are about 350 organisations registered with the CAA that may provide GA flight training, we have estimated that 80% of the savings will be passed on to pilots and 20% retained by business. This produces the following estimates:

### Benefits to pilots:

Low estimate	£40,000
High estimate	£80,000
Best estimate	£60,000

### Benefits to business:

Low estimate	£10,000
High estimate	£20,000
Best estimate	£15,000

We recognise that this proposal will have a mixed effect on existing businesses. Some schools will not be able to make as much money as they currently do from their CofA aircraft as some pilots will choose to train in cheaper PtoF aircraft instead. However, those schools that equip themselves with PtoF aircraft will be able to increase their business, and an overall reduction in the cost of flight training would lead to more pilots being trained. We have not been able to monetise these impacts on flight schools because of the small and disparate nature of the operations concerned, as well of the mixed results we received from them in our consultation. Any further research would be unlikely to produce results and would be disproportionate given our expectations of the level of impacts concerned.

We, therefore, have only included the direct effects of the use of PtoF aircraft mentioned above. Despite not being able to monetise all the impacts of this proposal, we consider that the benefits to those learning to fly of cheaper flight training would make pursuing this proposal worthwhile.

## **5.2 Proposals which we expect will lead to an increase in the GA market, but for which we cannot monetise the impact**

### **5.2.1 Proposal 5 (ANO Schedule 2, Part B) – Special category**

The ANO allows for a Special Category CofA. This is an intermediate level of airworthiness certification, between that of a permit to fly and a full certificate of airworthiness.

Generally we no longer issue Special Category certificates, however, we propose to re-activate their use for larger, more complex aircraft that do not hold an ICAO compliant CofA, but could be allowed to conduct some commercial operations.

We are therefore proposing to amend the ANO to allow the Special Category to include commercial (but not commercial air transport) operation privileges<sup>1</sup>. For example it could be used for aircraft that have been modified beyond compliance with the original type design, or for ex-military aircraft

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<sup>1</sup> For example scenic experience flights would be allowed, but not scheduled or chartered flights transporting fare paying passengers from one destination to another.

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that have never had a civil type certificate. Commercial aerial application work would be a possible use for such aircraft, which would otherwise not be permitted to conduct commercial operations. They could be used as an alternative to potentially more expensive aircraft on an ICAO CofA or on the military register. In some cases, it might allow for a highly specialised operation to take place that another suitable aircraft simply would not be available for.

67% of respondents to the first consultation thought this proposal would enable reduced business costs or allow expansion into new areas of work. Respondents thought it could expand the number of aircraft certified to this standard, for example enabling ex-military aircraft to be used for more commercial civil purposes.

Although a majority of respondents indicated that these proposals would lead to benefits, we have no indication of how many people would take advantage of the increased opportunities available for special category aircraft. We have, therefore, not been able to monetise these potential benefits.

**5.2.3 Proposal 6 – Aircraft registration** The aircraft registration provisions in the ANO largely reflect ICAO requirements to maintain a registry, and were not considered to represent an undue burden on GA activity.

Currently UK registered aircraft may be owned by:

- EEA (European Economic Area) or Commonwealth citizens; and
- UK resident non-EEA or Commonwealth citizens, but the aircraft must only be used for private flying

We are proposing to allow UK registered aircraft to be owned by non-EEA citizens, potentially resident or not, and used for commercial operations. We would still have the power to refuse a registration, or demand that an aircraft is registered elsewhere, if we thought the aircraft owner did not have sufficient connection to the UK. Overall we consider this would increase the number of UK registered aircraft in the UK, and give us better oversight of them.

This approach would also ease situations in which aircraft that are currently on the UK register change ownership and the use of the aircraft is suddenly restricted, or the registration is voided completely, simply because the aircraft has passed into the hands of a non-EEA or Commonwealth citizen.

We are also proposing to allow aircraft owned by non-EEA citizens to be used for commercial operations, but not for public transport services.

71% of respondents to the first consultation thought this could have financial benefits. Examples included:

- reduction in CAA administration costs;
- creating maintenance and support opportunities for UK companies supporting foreign owned aircraft;
- increased GA activity in the UK;
- cheaper and better aircraft would be available in the UK to the benefit of the industry; and
- encouragement of part ownership and foreign investment.

We do not have any information on the amount of people who would be able to benefit from this proposal, so we have not been able to monetise the benefits.

### **5.3 Proposals which we expect will have little material impact**

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**5.2.2 Proposal 7 (ANO Schedule 2, Part A) – ‘A’ conditions** Currently, if a PtoF aircraft needs to be flown to a place of maintenance or repair, without its permit being valid, the owner must apply to us for a permit to test to be issued to allow the flight to take place. This is in contrast to a non-EASA aircraft on a CofA, which may be flown if a licensed engineer certifies that the aircraft is fit to fly. This is known as flying under ‘A conditions’ and is considerably less burdensome than requiring a permit to test.

If a permit to test is not issued, the aircraft either has to be transported by road to a place of maintenance or repair, or those carrying out the maintenance or repair have to travel to the aircraft.

We consider that allowing PtoF aircraft to operate under A conditions would be a useful alleviation when an aircraft needs to be flown to a place of suitable maintenance or repair, without a valid permit. This option is already available to non-EASA aircraft with a CofA, so we believe it could also be adopted for PtoF aircraft without any impact on safety.

86% of respondents to the first consultation considered that this proposal could bring potential financial savings. Potential savings identified were:

- savings in dismantling and ground movement costs, which may lead to damage;
- speed and simplicity of moving aircraft;
- less delay and downtime;
- saving on time and travel costs of engineer or inspector travelling to the aircraft; and
- no permission fees to pay

One respondent thought this proposal would save about £400 per event. We have no figures for the number of events per year so we have been unable to accurately monetise this benefit. Our best estimate is that it is likely to be small, perhaps about ten events per year. We do not consider that this benefit would be material and, therefore, do not consider it would be proportionate to carry out further research.

**5.3.1 Proposal 8 (ANO Article 147) – GA flight time limitations** Currently, all hours that commercial pilots fly, except those flown privately in aircraft weighing less than 1,600kgs, are counted towards flight time limitations of 100 hours in 28 days or 900 hours in a year. In reality, few GA pilots reach those limits, but they are still bound by them.

We believe that detailed flight time limitations are not necessary for there to be an acceptable level of safety in GA operations. This is in line with the general principle that those who can understand and control their own risks should be allowed more scope to do so. This is in contrast to the commercial air transport world, in which limitations are required to control the risks associated with commercial pressure, and are necessary to achieve an acceptable level of safety. This proposal will not affect flight time limitations for commercial flights.

In response to the first consultation, 86% of respondents thought this proposal would not affect the number of hours they fly. Consequently we do not consider that this proposal would have a material impact on either private pilots or businesses. We do consider that it will bring some benefit to the probably small number of private pilots affected who would be able to fly some additional hours for pleasure.

**5.3.2 Proposal 9 (ANO Article 13) – Police operations** Currently those who undertake airborne police operations require a specific police air operators certificate (PAOC). There are a few, often voluntary, organisations that wish to assist the emergency services, particularly the police, by using light aircraft for aerial search purposes and other missions. We consider that there may be circumstances in which it would be appropriate for organisations to take part in airborne police operations, in a supporting role, without needing to comply with the full requirements of an AOC.



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We are proposing to amend the ANO to allow a permission to be issued, allowing operation in the service of the police without holding a PAOC, provided we are satisfied that the proposal is acceptably safe, and the organisation has the support of the relevant police force. We will need to consider how to recover any additional costs associated with the grant of such a permission.

Most respondents to the first consultation thought that those who would assist the police would mainly be volunteers or charities. Police Scotland was unsure whether it would receive any economic benefits. The Scottish Government thought it would allow Police Scotland to enhance the efficiency of its in-house air activity. However, it did not consider it possible to quantify the benefits at present.

We consider that there could be cost savings for Police Scotland, and, potentially, other police forces if a PAOC was not required for all who take part in airborne police operations. We are unable to monetise this potential benefit.

There could be some small increase in GA activity if volunteers are able to fly more in support of police missions. However, we do not consider this increase would be material.

We expect that over time the police will make more use of drones and that the benefits from doing so will be far more substantial than the, expected, modest benefits from this proposal.

**5.3.3 Proposal 10 (ANO Articles 207/208) - Aerodromes** Currently unlicensed aerodromes can only handle commercial air transport or training flights from aircraft weighing no more than 2,730 kilograms. We are proposing to raise this limit so they can handle commercial flights from aircraft weighing up to 5,700 kilograms. There are currently 385 aircraft on the UK register that fall between the two weight limits and could make use of this proposal. 126 of them hold an air operators certificate (AOC) so they could be used for commercial air transport. All could be used for flight training.

The proposal will mean that about 385 aircraft will be able to use unlicensed aerodromes that cannot at present, 126 of them for commercial air transport. This will give them more flexibility over where they can fly, and could lead to some time saving and increased business. We have not been able to monetise this potential benefit, but expect the impact will not be material.

It is possible that some licensed aerodromes will decide to become unlicensed if this proposal becomes law. However, we expect few of them, if any, will choose to do so. Thus we do not expect a material impact from this possibility.

**5.3.4 Proposal 11 – Pilot owner maintenance** We propose to amend our approach to pilot owner maintenance for non-EASA aircraft. The UK approach involves a specific list of tasks, whereas the EASA approach is to specify general characteristics that a task must have in order to be performed by a pilot. We are proposing to align approaches.

Where pilots are able to undertake maintenance tasks that previously had to be undertaken by approved maintenance organisations they will save some cost. Only about 600 aircraft would be affected by this change, and we anticipate that most pilots would not decide to carry out their own maintenance. We, therefore, do not consider that this proposal will have a material impact on either private pilots or business.

**5.3.5 Proposal 12 (ANO Article 62) – Third country licence holders** The current ANO allows valid third country licence holders to fly UK registered aircraft. This is limited to private flights, under instrument flight rules (IFR), if an instrument rating is held, outside of controlled airspace. Controlled airspace is used more intensively by commercial airlines. This proposal would allow an instructor, with a valid third party licence and qualified to train pilots for a foreign licence to teach towards that licence in a UK registered aircraft in the UK.

68% of respondents to the first consultation thought this change would have financial impacts. Examples include:

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- more people would fly
- pilots would shop around to obtain the least expensive or easiest option causing harm to UK flying schools
- the UK would be a more attractive place to fly which will increase business for many aviation related businesses;

We do not know how many third party licence holders would be able to take advantage of the opportunities arising from this proposal. Our expectation is that the numbers would be small, so we do not consider that it would be worthwhile to conduct further research. We, therefore have not been able to monetise these impacts.

### **5.4 Conclusion on impact**

Our proposals to amend the ANO would have produce a number of benefits:

- a) benefits we have been able to monetise, from: time savings for business and private pilots through aligning EASA and domestic requirements, the production of the Skyway Code, and benefits to private pilots from enabling them to train, or maintain their licences, using cheaper aircraft;
- b) benefits we have not been able to monetise to private pilots and business through the expansion of GA activity. These arise from allowing some types of aircraft (including microlights) to undertake activities they are currently not permitted to do; and
- c) benefits through removing some minor unnecessary restrictions on pilots and the use of aircraft that we do not consider will be material.

A list of the monetised and non-monetised benefits by proposal are shown in the table below.

**Table 5 – Benefits of proposals – monetised and non-monetised (best estimate – non discounted)**

Proposal	Net benefit to private pilots		Net benefit to business		Net benefit to others	
	Monetised	Non-monetised	Monetised	Non-monetised	Monetised	Non-monetised
1, 2 Alignment with EASA and Skyway code	£8,695,358	-	£2,240,325	Yes	-	-
3 Private pilot licences	£6,250,000	-	-	-	-	-
4 Use of permit aircraft for commercial operations	£600,000	No	£150,000	Likely to be additional non-monetised costs and benefits	-	-
5 Special category	-	-	-	Yes	-	-
6 Aircraft registration	-	Yes	-	Yes	-	-
7 ‘A’ conditions	-	Likely to be small	-	Likely to be small	-	-
8 GA flight time limitations	-	-	-	-	-	-
9 Police operations	-	-	-	-	-	Net benefit to Police
10 Aerodromes	-	-	Likely to be small	-	Likely to be small	-
11 Pilot owner maintenance	-	Likely to be small	-	-	-	-
12 Third country licence holders	-	-	-	Likely to be small	-	-

**Table 6 – Benefits of proposals – monetised (best estimate – non-discounted)**

Proposal	Net benefit to private pilots	Net benefit to business	Net benefit to others	Total
	1, 2 Alignment with EASA and Skyway code	£8,695,358	£2,240,325	-
3 Private pilot licences	£6,250,000	-	-	£6,250,000
4 Use of permit aircraft for commercial operations	£600,000	£150,000	-	£750,000
<b>Total</b>	<b>£15,545,358</b>	<b>£2,390,325</b>	<b>-</b>	<b>£17,935,683</b>

## **6. Rationale and evidence that justify the level of analysis**

- 6.1 Prior to our first consultation we consulted three GA firms who undertook different types of work: a continuing airworthiness maintenance organisation, a type design organisation, and a certified maintenance organisation. They gave us estimates of the amount of time they spent reviewing compliance with the ANO.
- 6.2 Responses to the consultations have been used
- 6.3 Where quantitative analysis has not been possible, qualitative explanations have been used.

## **7 Risks and assumptions**

7.1 Our review of the ANO has been conducted in accordance with the principles of our GA policy framework. It is a key feature of our approach to GA risk management that we focus on the risks to:

- uninvolved third parties on the ground;
- users of commercial air transport flights; and
- other users of airspace.

7.2 The framework includes a series of questions that have been developed to ensure that we minimise the risks to those we are required to protect; that our regulation is consistent; and we do not gold-plate European regulations. We are focused primarily on protecting third parties from risks associated with GA activities, while enabling GA participants to manage their own risks. The assessment of risks by our Safety and Airspace Regulation Group is reviewed by our Policy Programmes Team to re-inforce the objectivity of the process.

7.3 The framework allows participants of GA activity to bear more risk, and not necessarily receive the same level of regulatory protection as those on commercial air transport flights, assuming that they are considered to understand the risks involved. We are not proposing any changes to the regulation of flying displays in this review. That issue is being considered in a separate review.

7.4 We have not been able to monetise potential benefits to business and private pilots from opportunities for more flying and new business opportunities.

7.5 We have based our figures on the current level of GA activity. As we expect the amount of GA activity to increase as a result of our proposals to reduce the regulatory burden on the sector, this means that our figures are conservative. If there is more GA activity the benefits for both business and private pilots will be higher than we have estimated.

## **8 Direct costs and benefits to business calculations**

8.1 The direct cost to business is set out in the evidence base and included in the summary sheet.

8.2 The CAA is funded by statutory charges on those it regulates. These fall both on private pilots and businesses. We have used historic data to apportion the benefits from reduced CAA costs between private pilots and businesses.

8.3 Our best estimate of the direct benefit to business is that there will be an estimated annual net benefit to business of £0.21m in 2015 prices.

## **9 One-in-Three-Out (OI3O) and the Business Impact Target (BIT)**

All of the proposals are de-regulatory or simplify the wording of the ANO. Together they will be an 'OUT' as there is a net benefit to business per year. As some of the proposals remove current restrictions on activity we expect them to increase the amount of flying and, therefore, stimulate the GA market. The measures are also qualifying regulatory provisions (QRP) and therefore the EANCB will count towards the BIT.

## **10 Wider impact**

10.1 The wider social, environmental and economic impact of these policy proposals has been considered, together with possible unintended consequences. The results of the specific impact tests are below. Table 7 summarises the specific impact tests.

**Table 7: Specific impact tests**

<b>Type of test undertaken</b>	<b>Results in evidence base</b>	<b>Results in Annex B</b>
Competition Assessment	No	Yes
Small Firms Impact Test	No	Yes
Justice Impact Test	No	Yes
Sustainable Development	No	Yes
Carbon Assessment	No	Yes
Other Environment	No	Yes
Health Impact Assessment	No	Yes
Race Equality	No	Yes
Disability Equality	No	Yes
Gender Equality	No	Yes
Human Rights	No	Yes
Rural Proofing	No	Yes
Family Impact Test	No	Yes

### **10.2 Competition assessment**

10.2.1 The proposals will increase competition by removing restrictions that currently prevent some aircraft, or pilots, from undertaking certain activities, and, thus competing with existing businesses. The proposals that will do this are:

- Proposal 3 will allow businesses owning microlights to hire them to pilots holding PPL licences who want to maintain their SEP rating. This change will allow these businesses to compete with existing flight schools for these customers.
- Proposal 4 will allow businesses that own PtoF aircraft to train new pilots. This change will allow these businesses to compete with existing flight schools for trainee pilots.
- Proposal 5 will allow businesses with special category aircraft to use them for commercial purposes. This change will allow these businesses to compete with other businesses that can currently provide these commercial activities.
- Proposal 6 will allow non-EEA citizens to use UK registered aircraft for commercial operations. This change will allow businesses owned by or employing these citizens to compete for customers with other businesses that can currently provide these operations.
- Proposal 10 will allow unlicensed aerodromes to handle aircraft weighing up to 5,700 kilogrammes for commercial air transport or flying training. This change will allow these aerodromes to compete for customers using these aircraft with licensed aerodromes that can currently provide services for them.
- Proposal 12 will allow an instructor with a valid third party licence to train pilots for a foreign licence in a UK registered aircraft in the UK. This change will allow such instructors to

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compete for customers with instructors in other countries that can train pilots for a foreign licence.

### **10.3 Small Firms Impact Test**

10.3.1 GA in the UK is dominated by small and medium enterprises (SMEs). All of the nineteen businesses that responded to the second consultation are SMEs. The proposals will benefit these businesses by removing restrictions allowing them greater opportunities to carry out new activities. This should allow them to expand their business. As small businesses generally have fewer resources available to learn about and adjust to regulatory change, we expect that they will incur relatively higher costs in finding out about the new provisions of the ANO. However, these costs would be a one-off occurrence, and the cost savings from the reductions in time in understanding simpler regulations will also be relatively higher for small firms.

10.3.2 Taking a conservative estimate we consider that 85% of the impact of the proposals will affect SMEs. As the total net present benefit of the proposals to business is £1.97m, we estimate that the net benefit to SMEs will be £1.67m. Similarly, 85 % of the total EANCB of £0.22m will benefit SMEs, giving an EANCB for SMEs of £0.19m. All the amounts are in 2015 prices.

### **10.4 Justice Impact Test**

10.4.1 As the proposals would remove some current legal restrictions, there should be no justice impact from Option 1.

### **10.5 Sustainable Development**

10.5.1 The Government Guiding Principles on Sustainable Development are:

- **Living Within Environmental Limits:** Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations.
- **Ensuring a Strong, Healthy and Just Society:** Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all.
- **Achieving a Sustainable Economy:** Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.
- **Using Sound Science Responsibly:** Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.
- **Promoting Good Governance:** Actively promoting effective, participative systems of governance in all levels of society engaging people's creativity, energy, and diversity.

10.5.2 The proposals would have no effect upon achievement of the principles for sustainable development.

### **10.6 Carbon Assessment**

10.6.1 Option 1 might increase the volume of GA traffic. However, any increase is unlikely to be material compared to the overall volume of aviation traffic as a result of these proposals. Therefore, no material change in greenhouse gas emissions is expected as a result of these proposals.

### **10.7 Other Environment**

**10.7.1 Noise pollution:** Option 1 might increase the volume of GA traffic. However, any increase is unlikely to be material compared to the overall volume of aviation traffic as a result of these proposals. Therefore, no material change to aircraft noise is expected as a result of these proposals.

**10.7.2 Air quality:** Option 1 might increase the volume of GA traffic. However, any increase is unlikely to be material compared to the overall volume of aviation traffic as a result of these proposals. Therefore, no material change to air quality is expected as a result of these proposals.

## **10.8 Health Impact Assessment**

10.8.1 The proposals should have no impact on health.

## **10.9 Equality Impact Tests**

10.9.1 The following impact tests have been considered. The measures will be implemented equally across all groups regulated by the CAA regardless of their race, age, sexual orientation, ethnic origin, disability or gender. As a result we anticipate there will be no impact with regard to the following:

- race equality
- disability equality
- gender equality
- human rights.

## **10.10 Rural proofing**

10.10.1 As GA airfields tend to be in rural areas and GA aircraft tend to fly more over rural areas than urban areas, the economic benefits of the proposals are more likely to be in rural areas, as will the impact of any increased noise. The increase in noise is not expected to be material.

## **10.11 Family Impact Test**

10.11.1 The proposals are not expected to impact on families.

## **11 Summary and preferred option with description of post implementation review**

11.1 The preferred option is Option 1. This allows us to reduce the regulatory burden while maintaining the current high standard of safety and culture of compliance.

11.2 The ANO is reviewed regularly, primarily to check that the legal text remains fit for purpose. No specific review of these proposals has been planned, but the CAA will continue to keep the economic health of the GA sector under review, through monitoring the level of activity in the sector and regular meetings of the General Business and Aviation Strategic Forum (attended by the CAA and GA industry stakeholders) which currently meets quarterly.

**ERROR! UNKNOWN DOCUMENT PROPERTY NAME.****Annex A – LOW ESTIMATE AND HIGH ESTIMATE NET BENEFIT TABLES****Table A1 – Impact on private pilots per year – low estimate, 2015 prices (non-discounted)**

<b>Year</b>	<b>Skyway Code costs</b>	<b>Familiarisation costs</b>	<b>Benefits from time saving</b>	<b>Net benefits</b>
0	5,400	430,445	0	-435,845
1	720	0	438,174	437,454
2	0	0	445,734	445,734
3	0	0	453,063	453,0632
4	0	0	460,598	460,598
5	0	0	468,745	468,7458
6	0	0	477,097	477,0974
7	0	0	485,665	485,665
8	0	0	494,944	494,944
9	0	0	504,480	504,480
<b>Total</b>	<b>6,120</b>	<b>430,445</b>	<b>4,228,501</b>	<b>3,791,936</b>

**Table A2– Impact on private pilots per year – high estimate, 2015 prices (non-discounted)**

<b>Year</b>	<b>Skyway Code costs</b>	<b>Familiarisation costs</b>	<b>Benefits from time saving</b>	<b>Net benefits</b>
0	9,000	2,152,225	0	-2,161,225
1	720	0	2,190,871	2,190,151
2	0	0	2,228,671	2,228,671
3	0	0	2,265,313	2,265,313
4	0	0	2,302,992	2,302,992
5	0	0	2,343,726	2,343,726
6	0	0	2,385,485	2,385,485
7	0	0	2,428,327	2,428,327
8	0	0	2,474,721	2,474,721
9	0	0	2,522,400	2,522,400
<b>Total</b>	<b>9,720</b>	<b>2,152,225</b>	<b>21,142,504</b>	<b>18,980,559</b>



**Table A3 – Impact on business per year – low estimate, 2015 prices (non-discounted)**

<b>Year</b>	<b>Skyway Code costs</b>	<b>Familiarisation costs</b>	<b>Benefits from time saving</b>	<b>Net benefits</b>
0	30,600	48,400	0	-79,000
1	4,080	0	49,269	45,189
2	0	0	50,600	50,600
3	0	0	51,432	51,432
4	0	0	52,800	52,800
5	0	0	53,734	53,734
6	0	0	55,000	55,000
7	0	0	55,988	55,988
8	0	0	57,200	57,200
9	0	0	58,302	58,302
<b>Total</b>	<b>34,680</b>	<b>48,400</b>	<b>484,325</b>	<b>401,245</b>

**Table A4– Impact on business per year – high estimate, 2015 prices (non-discounted)**

<b>Year</b>	<b>Skyway Code costs</b>	<b>Familiarisation costs</b>	<b>Benefits from time saving</b>	<b>Net benefits</b>
0	51,000	786,500	0	-837,500
1	4,080	0	800,623	796,543
2	0	0	822,250	822,250
3	0	0	835,769	835,769
4	0	0	858,000	858,000
5	0	0	873,176	873,176
6	0	0	893,750	893,750
7	0	0	909,801	909,801
8	0	0	929,500	929,500
9	0	0	947,408	947,408
<b>Total</b>	<b>55,080</b>	<b>786,500</b>	<b>7,870,277</b>	<b>7,028,697</b>

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<b>Title:</b> UK National Private Pilot's License (NPPL) / UK Private Pilot's License (UK PPL) Medical Self Declaration <b>IA No:</b> <b>Lead department or agency:</b> Civil Aviation Authority (CAA) <b>Other departments or agencies:</b> Department for Transport	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 25/01/2016		
	<b>Stage:</b> Final		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Secondary legislation		
	<b>Contact for enquiries:</b> Mark Shortman, CAA mark.shortman@caa.co.uk 01293 768645		

<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b> EANCB Validated
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Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB in 2014 prices)	In scope of One-In, Three-Out? Measure qualifies as
£9.04m	£0.98m	-£0.11m	Yes   OUT

**What is the problem under consideration? Why is government intervention necessary?**

The General Aviation (GA) Red Tape Challenge and Ministerial challenge to the CAA prompted it to review if medical requirements for certain national pilot's licences could be reduced without affecting safety. It was felt that current requirements were overly burdensome when compared to other regulatory regimes such as the United States Federal Aviation Authority (FAA) Sport Pilot Licence. This proposal is to reduce these burdens. This project supports the CAA commitment to deregulate wherever possible, regulate only where necessary and not to gold-plate.

**What are the policy objectives and the intended effects?**

We wish to remove unnecessary regulatory burdens to help create a larger and more dynamic GA sector, while maintaining a high standard of aviation safety. The objective of the policy is to ensure that the burden of providing proof of a pilot's fitness-to-fly, is proportionate to the risks involved.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

Policy Option 0 (baseline option - Discounted): Do Nothing; i.e. do not amend the Air Navigation Order (ANO) to reduce the burdens on GA pilots with regard to medical requirements.

Policy Option 1 (Discounted): Amend the ANO to allow GA pilots to self-declare their fitness-to-fly without the requirement to attend a medical examination/consultation, subject to certain specific exceptions and conditions.

Policy Option 2 (Preferred): Amend the ANO to allow GA pilots to self-declare their fitness-to-fly without the requirement to attend a medical examination/consultation, and without the certain specific exceptions and conditions present in Option 1.

<b>Will the policy be reviewed?</b> It will not be reviewed. <b>If applicable, set review date:</b> Month/Year					
Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.		<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)		<b>Traded:</b> N/A		<b>Non-traded:</b> N/A	

***I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.***

Signed by the responsible Minister: \_\_\_\_\_ Date: \_\_\_\_\_

## Summary: Analysis & Evidence

## Policy Option 1

**Description:** Amend the ANO to allow GA pilots to self-declare their fitness-to-fly without the requirement to attend a medical examination/consultation, subject to certain specific exceptions and conditions.

### FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: NQ	High: NQ	Best Estimate: NQ
<b>COSTS (£m)</b>	<b>Total Transition</b> (Constant Price) Years		<b>Average Annual</b> (excl. Transition) (Constant Price)	<b>Total Cost</b> (Present Value)	
Low	NQ		NQ	NQ	
High	NQ		NQ	NQ	
Best Estimate	NQ		NQ	NQ	
<b>Description and scale of key monetised costs by 'main affected groups'</b>					
None					
<b>Other key non-monetised costs by 'main affected groups'</b>					
Additional costs to pilots from having to prove relevant exemption from medical examination					
<b>BENEFITS (£m)</b>	<b>Total Transition</b> (Constant Price) Years		<b>Average Annual</b> (excl. Transition) (Constant Price)	<b>Total Benefit</b> (Present Value)	
Low	NQ		NQ	NQ	
High	NQ		NQ	NQ	
Best Estimate	NQ		NQ	NQ	
<b>Description and scale of key monetised benefits by 'main affected groups'</b>					
No monetised benefits					
<b>Other key non-monetised benefits by 'main affected groups'</b>					
Potential benefits to private pilot UK PPL and NPPL licence holders from not having to undertake regular medical assessments					
Potential benefits to flying instructors from not having to undertake regular medical assessments					
Key assumptions/sensitivities/risks				<b>Discount rate</b>	3.5%
We focus primarily on protecting third-parties from risks associated with GA activities, while enabling GA participants to manage their own risks. We do not consider that the changes will lead to any reduction in the level of safety.					
Where appropriate, we have used standard assumptions from relevant WebTAG and Green Book guidance.					

### BUSINESS ASSESSMENT (Option 2)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>In scope of OITO?</b>	<b>Measure qualifies as</b>
Costs: NQ	Benefits: NQ	Net: NQ	Yes	OUT

## Summary: Analysis & Evidence

## Policy Option 2

**Description:** Amend the ANO to allow GA pilots to self-declare their fitness-to-fly without the requirement to attend a medical examination/consultation, and without the certain specific exceptions and conditions present in Option 1.

### FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2015	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 6.50	High: 11.59	Best Estimate: 9.04

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.0	0.0	0.0
High	0.0	0.0	0.0
Best Estimate	0.0	0.0	0.0

#### Description and scale of key monetised costs by 'main affected groups'

None

#### Other key non-monetised costs by 'main affected groups'

No additional non-monetised costs.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	0.8	6.5
High	0.0	1.3	11.6
Best Estimate	0.0	1.1	9.0

#### Description and scale of key monetised benefits by 'main affected groups'

Benefits to private pilot UK PPL and NPPL licence holders from not having to undertake regular medical assessments

Benefits to flying instructors from not having to undertake regular medical assessments

#### Other key non-monetised benefits by 'main affected groups'

No additional non-monetised benefits

Key assumptions/sensitivities/risks

Discount rate

3.5%

We focus primarily on protecting third-parties from risks associated with GA activities, while enabling GA participants to manage their own risks. We do not consider that the changes will lead to any reduction in the level of safety.

Where appropriate, we have used standard assumptions from relevant WebTAG and Green Book guidance.

### BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0.0	Benefits: 0.1	Net: 0.1	Yes	OUT

## **EVIDENCE BASE**

### **1 Problem under consideration**

- 1.1 The UK Government is committed to reducing the burden of regulation, particularly where this is seen as disadvantageous to UK industry. The CAA is also committed, via the Government's Principles of Better Regulation, to establishing a proportionate safety regulatory framework coupled with a strategy of deregulating and delegating wherever possible. It is with regard to these strategic objectives that the CAA has conducted a project to assess the safety case for reducing the current medical requirements for private pilots with a UK Private Pilot Licence (UK PPL) or a UK National Private Pilot Licence (NPPL), which are currently felt to be overly burdensome when compared to other regulatory regimes, such as the US FAA Sport Pilot Licence.
- 1.2 The proposal is to remove unnecessary burdens from GA pilots who hold UK national private pilots licences by allowing them to self-declare their fitness-to-fly with no routine requirement to attend a medical examination/consultation. The proposal is in line with the CAA's approach to GA, to make the regulation of recreational flying more proportionate and less burdensome, while protecting third parties. This proposal also received a very positive response to a public consultation
- 1.3 Analysis of the safety implications of making the described changes to the medical requirements for pilots via this proposal was conducted by the CAA. Whilst there is a possibility that the risk for the serious incapacitation rate will increase from one event per year to two, analysis shows that the likelihood that this will result in a statistically meaningful rise in the fatal accident rate is minimal. Historical data shows that the risk to third parties on the ground from GA accidents is extremely low and any small increase in accidents is highly unlikely to materially increase the risk to third parties on the ground. There may be a slight increased risk to second parties (passengers) and other airspace users due to functional impairment or acute incapacity of the pilot. **Note:** full details of the analysis and risk profile of the proposed changes are contained in the CAA public consultation document CAP1284<sup>1</sup>.

### **2 Rationale for intervention**

- 2.1 We regulate to protect the safety of both pilots and passengers carried by GA, other users of airspace, including commercial air transport, and people on the ground. As GA is subject to European safety regulation we could not completely deregulate the sector even if we thought that would be appropriate.
- 2.2 In our GA policy framework, we have developed the following four principles that guide our approach to GA:
  - i) only regulate directly when necessary and do so proportionately;
  - j) deregulate where we can;
  - k) do not gold-plate, and quickly and efficiently remove gold-plating that already exists; and
  - l) help create a vibrant and dynamic GA sector in the UK.
- 2.3 In our review of regulations concerning the medical requirements for GA pilots who hold UK national private pilots licences a, b and d have had particular importance.
- 2.4 Our policy framework also sets out our approach to regulating safety, we seek to allow GA pilots to make informed decisions about the risks involved in their activity, while minimising the safety risks to third parties, whether they be passengers in GA aircraft, commercial air operators or people on the ground.

### **3 Policy objectives**

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<sup>1</sup> [http://publicapps.caa.co.uk/docs/33/CAP1284PublicconsultationUKPPLandNPPLMedical%20Requirements\(p\).pdf](http://publicapps.caa.co.uk/docs/33/CAP1284PublicconsultationUKPPLandNPPLMedical%20Requirements(p).pdf)

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3.1 The proposals are designed to:

- reduce the direct regulatory burden for GA pilots, via a proportional regulatory approach ; and
- maintain the current high standards of safety.

### **4 Options**

4.1 We have considered three options:

Option 0 – do nothing

Option 1 – amend the Air Navigation Order (ANO) to reduce the burdens on GA pilots without affecting safety by allowing them to self-declare their fitness-to-fly without the routine requirement to attend a medical examination/consultation, with exceptions for pilots who exceed a specified age limit and flight instructors, and limits on the number of passengers that may be carried.

Option 2 – amend the ANO to reduce the the burdens on GA pilots without affecting safety by allowing them to self-declare their fitness-to-fly without the routine requirement to attend a medical examination/consultation, without a specified age limit, without excluding flight instructors and without limits on the number of passengers that may be carried.

### **5 OI30**

5.1 The proposal is de-regulatory so will be an ‘OUT’ as there is a net benefit to the UK GA pilot community per year, some of whom are flight instructors. The proposal is considered to be a qualifying regulatory provision, with the impact on flight instructors being scored against the business impact target (BIT).

### **6 Option 0 – Do Nothing**

6.1 The option of ‘Do Nothing’ was considered. The current arrangements require UK NPPL license holders to undertake a medical examination from a GP and get a certificate declaring their fitness-to-fly. UK PPL license holders require an EU Class 2 medical examination, which is more costly and is undertaken by a trained Aeromedical Examiner (AME). However, this was discounted as the existing medical requirements for private pilots are considered to be disproportionate and the CAA has made a public commitment to regulate only where needed and to do so proportionately.

### **7 Option 1 – NPPL/UK PPL Medical Self-Declaration (with specified exceptions)**

7.1 The proposal is to amend the ANO to reduce the regulatory burden on UK GA private pilots flying GA aircraft in the UK. We consulted on the proposal in May 2015 and this consultation received an overwhelmingly positive response.

7.2 Based on the proposed exceptions which included imposing an age limit, excluding flight instructors, and further limiting the number of passengers that could be carried, those falling outside of this proposal would be required to hold a Light Aircraft Pilot Licence (LAPL) medical (rather than an NPPL medical under the current system). Consultation responses and feedback from the GA Partnership indicated that overall this could be seen as more regulatory and onerous than the existing process as it would require additional data, which would not be in line with the overall strategy to deregulate GA where possible. In addition, we considered requiring pilots to self-certify and submit information on a regular basis to it (as opposed to once prior to the age of 70). However, this was also considered to be more onerous than was needed and so was not considered a viable option.

Option 1 has not been monetised.

### **8 Option 2 – NPPL/UK PPL Medical Self-Declaration**

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- 8.1 The proposal is to amend the ANO to reduce the regulatory burden on UK GA private pilots flying GA aircraft in the UK. We consulted on the proposal in May 2015 and this consultation received an overwhelmingly positive response.
- 8.2 The proposal is to reduce the current medical requirements for private pilots, so that those with a PPL or an NPPL will only be required to meet the Group 1 Ordinary Driving Licence (i.e. private driving) medical standard with no routine requirement to attend for a medical examination. The pilot will be required to complete an on-line CAA form to make a legally binding statement (which could result in prosecution of the pilot, if they provided false information) that they believe they meet this requirement, but there will be no requirement for the pilot to physically hold a driving licence. No General Practitioner (GP) or Aeromedical Examiner (AME) intervention would be required provided the pilot did not fall outside the defined criteria. The current NPPL medical system would be removed and anyone falling outside of the criteria of the new system would be required to have an EASA (European Aviation Safety Agency) LAPL medical.

### **9. Costs and benefits of Option 2**

- 9.1 The UK GA private pilot community will benefit most from the proposal as the current cost and time burden on this community is considered to be significant. This proposal is in line with the CAA's approach to GA, to make the regulation of recreational flying more proportionate and less burdensome, while protecting third parties.
- 9.2 Based on CAA records of UK PPL holders, it is estimated that the maximum number of private pilots who could take advantage of this option, would be at most 31,600. However, it should be noted that the UK PPL is on the decline as pilots transfer to EASA licences (as required under EU regulation by 2018). In addition many pilots holding UK PPLs may also hold EASA PPLs and therefore still require a medical assessment/consultation for that EASA licence. It is therefore assumed that only half of UK PPL holders would be in a position to take advantage of the benefits delivered by Option 2.
- 9.3 In the case of NPPL, the CAA does not have an accurate record of the number of licences currently held (under the delegated NPPL process), therefore estimates for this section of the GA pilot community are based on the number of NPPLs issued over the last 10 years, this results in an estimate that 17,000 of the 31,600 private pilots are NPPL holders.
- 9.4 We have assumed that the self-declaration approach would take a pilot 30 minutes to complete. Based on these estimates and assumptions total cost and time savings of approximately £1m and 10,000 hours per annum would be realised by the GA private pilot community.
- 9.5 A CAA assessment of the proposals found they would not have a substantive impact on the overall level of safety within the GA sector. An integral part of the proposal is to ensure that third party safety risks have been assessed and reasonably mitigated.
- 9.6 The following cost/benefit assumptions were stated in the consultation document (CAP1284) and respondents were asked to (and in the majority did) indicate their agreement with their accuracy:
- The main benefit to the pilot will be the financial savings through no longer requiring GP or AME involvement. These savings will be dependent on whether the pilot holds an NPPL or a UK PPL:

**NPPL** – assumption that the typical cost for GP counter-signature is £0 - £80 per visit, with a central estimate of £40. This is based on the average price charged by a number of NHS surgeries for providing a medical certificate for an NPPL license.

**UK PPL** – assumption that an EU Class 2 Medical varies from £140 - £200, depending on whether it is initial certification or revalidation and whether an ECG is required. This assumption is based on CAA charges at its Aeromedical Centre and charges at organisations that provide a similar service.

The other benefit is the time saved by the pilot including travel time to and from the GP or AME, estimated as the following:

**NPPL:** 30 – 60 minutes.

**UK PPL – EU Class 2 Medical:** 60-90 mins

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- 9.7 **Benefits to private pilots** – Based on CAA expertise, we have conservatively assumed that 50% of pilots will be in a position to take advantage of Option 2 (with the others not being eligible due to disqualifying conditions etc.). As stated in paragraph 9.3, we have estimated that there are 17,000 NPPL holders. For the 14,600 UK PPL holders, this splits between those that hold a flying instructor rating and those that don't. We have assumed 33% (validated via CAA GA Licensing Standards experts) of UK PPL pilots hold an associated flight instructor rating for Annex II (i.e. non-EASA aircraft) and that only 33% of these will continue to only instruct on Annex II. Hence, of the 14,600 UK PPL holders; we believe 11% = 1,606 are in the category of "UK PPL with Instructor Rating", leaving 12,994 UK PPL non-flying instructor category.

Section 9.8 below gives details for analysis and a worked example beneath the tables. Using a cost of leisure time taken from WebTAG, of £7.17 per hour in 2016<sup>2</sup> (at 2015 prices) and increased in line with GDP per capita to £8.41 in 2025, gives us the following range of average cost savings per year in 2016:

NPPL and UK PPL non-flying instructor:

Low estimate: £614,876 + (5,998hrs x £7.17) = £ 657,897

High estimate: £1,135,434 + (9,801hrs x £7.17) = £1,205,724

Best estimate: (mid-point) = £ 931,810

- 9.8 **Benefits to business (flying instructors)** – There are 1,606 in this category, again with 50% being assumed to be in a position to take advantage of Option 2. We assume an hourly wage of £30, which grows in line with GDP per capita.

UK PPL flying instructor:

Low estimate: = £ 92,281

High estimate: = £132,993

Best estimate: (mid-point) = £112,637

**Total savings in 2016** (i.e. figures from 9.7 + 9.8):

Low estimate: = £ 750,177

High estimate: = £1,338,717

Best estimate: (mid-point) = £1,044,447

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<sup>2</sup> WebTAG Databook A1.3.1/A1.3.2



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**Non-Flying Instructors**

NPPL Licences = 17000

Age	Frequency	%	No. Pilots	Annualised Cost <sup>1</sup> Range			Annual Hours <sup>2</sup> Range			Total Cost Range			Total Hours Range		
				Low	Best	High	Low	Best	High	Low	Best	High	Low	Best	High
<45	Once	38%	6460	£0	£4	£8	0.05	0.075	0.1	£0	£25,840	£51,680	323	485	646
45-59	Every 5 yrs	35%	5950	£0	£8	£16	0.1	0.15	0.2	£0	£47,600	£95,200	595	893	1190
60-65+	Annually	27%	4590	£0	£40	£80	0.5	0.75	1	£0	£183,600	£367,200	2295	3443	4590
<b>TOTAL:</b>				<b>£0</b>	<b>£257,040</b>	<b>£514,080</b>	<b>£0</b>	<b>£257,040</b>	<b>£514,080</b>	<b>3213</b>	<b>4820</b>	<b>6426</b>	<b>1607</b>	<b>2410</b>	<b>3213</b>

Assume 50% applicability for Option 2:

UK PPL Licences = 12994

Age	Frequency	%	No. Pilots	Annualised Cost <sup>1</sup> Range			Annual Hours <sup>2</sup> Range			Total Cost Range			Total Hours Range		
				Low	Best	High	Low	Best	High	Low	Best	High	Low	Best	High
<40	Every 5 yrs	28%	3638	£28	£34	£40	0.2	0.25	0.3	£101,864	£123,692	£145,520	728	910	1091
40-50	Every 2 yrs	20%	2599	£70	£85	£100	0.5	0.625	0.75	£181,930	£220,915	£259,900	1300	1624	1949
50	Annually	52%	6757	£140	£170	£200	1	1.5	1.5	£945,980	£1,148,690	£1,351,400	6757	8446	10136
<b>TOTAL:</b>				<b>£1,229,774</b>	<b>£1,493,297</b>	<b>£1,756,820</b>	<b>£1,229,774</b>	<b>£1,493,297</b>	<b>£1,756,820</b>	<b>8784</b>	<b>10980</b>	<b>13176</b>	<b>4392</b>	<b>5490</b>	<b>6588</b>

Assume 50% applicability for Option 2:

Total Assumed Benefits =	Cost			Hours		
	Low	Best	High	Low	Best	High
<b>£614,887</b>	<b>£875,169</b>	<b>£1,135,450</b>	<b>£9801</b>	<b>5999</b>	<b>7900</b>	<b>9801</b>

1. Annual Cost is calculated by dividing the assumed charge per visit by the number of visits required according to age (assuming one visit in the 10 years prior to age 45 for NPPL)
2. Annual Hours are calculated by dividing the time required per visit by the number of visits required according to age (assuming one visit in the 10 years prior to age 45 for NPPL)

**Benefits to private flyers (NPPL + UK PPL license-holders)**

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Low estimate	£657,897	£658,676	£659,456	£660,176	£660,956	£661,736	£662,575	£663,415	£664,375	£665,335
Best estimate	£931,810	£932,837	£933,864	£934,812	£935,839	£936,866	£937,972	£939,078	£940,342	£941,606
High estimate	£1,205,724	£1,206,998	£1,208,272	£1,209,448	£1,210,722	£1,211,996	£1,213,369	£1,214,741	£1,216,309	£1,217,877

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**Eligible Non EASA (Annex II) Type Flying Instructors**

**UK PPL with Instructor Rating = 1606**

**Assumed Average Hourly Income (2016) = £30**

Age	Frequency	%	No. Pilots	Annualised Cost <sup>3</sup> Range			Annual Hours <sup>4</sup> Range			Total Cost Range			Total Hours Range		
				Low	Best	High	Low	Best	High	Low	Best	High	Low	Best	High
<40	Every 5 yrs	28%	450	£28	£34	£40	0.2	0.25	0.3	£12,591	£15,289	£17,987	90	112	135
40-50	Every 2 yrs	20%	321	£70	£85	£100	0.5	0.625	0.75	£22,484	£27,302	£32,120	161	201	241
50	Annually	52%	835	£140	£170	£200	1	1.5	1.5	£116,917	£141,970	£167,024	835	1044	1253
<b>TOTAL:</b>										£151,992	£184,562	£217,131	1086	1357	1628

Assume 50% applicability for Option 2:  
Monetised time cost: £16,285 £20,356 £24,427

Total Assumed Benefits =		
Low	Best	High
£92,281	£112,637	£132,993

3. Annual Cost is calculated by dividing the assumed charge per visit by the number of visits required according to age
4. Annual Hours are calculated by dividing the time required per visit by the number of visits required according to age

**Benefits to flight instructors (UK PPL license-holders)**

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Low estimate	£92,281	£92,576	£92,871	£93,144	£93,439	£93,734	£94,052	£94,370	£94,734	£95,097
Best estimate	£112,637	£113,006	£113,375	£113,716	£114,085	£114,454	£114,851	£115,249	£115,703	£116,157
High estimate	£132,993	£133,436	£133,879	£134,287	£134,730	£135,173	£135,650	£136,127	£136,672	£137,217

Worked example for explanation:

Taking the 40-50 age range in the "UK PPL with Instructor Rating" table:

- They have a medical every 2 years (Frequency).
- It is calculated that 20% of the pilots are in this age range (%), which means the number of pilots is 20% of 1606 = 321.2 pilots (No. Pilots).
- The Min cost of a medical is £140, so the "Min. Annual Cost Range" is £140 / 2 = £70. So the "Min. Total Cost Range" is 321.2 x £70 = £22,484.
- It takes between 60 and 90mins (=1 to 1.5hrs) to have the medical, so "Min. Annual Hours Range" is 1hr / 2 = 0.5hrs.
- So the "Min. Total Hours Range" is 321.1 x 0.5hrs = 160.6 hours (rounded to 161).
- In Total, Pilots could have been earning £30 per hour, so the Min. Potential Lost Income is 542.83hrs (rounded to 543) x £30 = £16,285.

## **10 Risks and assumptions**

- 10.1 Our proposals to amend the ANO have been formed in accordance with the principles of our GA policy framework. It is a key feature of our approach to GA risk management that we focus on the risks to:
- uninvolved third parties on the ground;
  - users of commercial air transport flights; and
  - other users of airspace.
- 10.2 The framework includes a series of questions that have been developed to ensure that we minimise the risks to those we are required to protect; that our regulation is consistent; and we do not gold-plate European regulations. We are focused primarily on protecting third parties from risks associated with GA activities, while enabling GA participants to manage their own risks. The assessment of risks by the CAA's Safety and Airspace Regulation Group is reviewed by its Policy Programmes Team to re-enforce the objectivity of the process.

## **11 Direct costs and benefits to business calculations / Justification of level of analysis**

- 11.1 The proposals in option 2 will lead to modest benefits to small businesses. This has been appraised in section 9.
- 11.2 The analysis in this impact assessment has used standard assumptions when calculating the benefits of the proposals to private pilots. There is some uncertainty around how many private pilots will benefit, and how many of these operate businesses – but in both circumstances we have used suitable ranges in the analysis. Whilst further research would reduce some of the uncertainty, the resource cost in doing so would be disproportionate, and it is not expected to change the conclusions of the impact assessment.

## **12 Wider impact**

- 12.1 The wider social, environmental and economic impact of Option 2 has been considered, together with possible unintended consequences. For social, environmental and economic impacts the results are below.
- 12.2 Competition assessment** – Option 2 should have no impact on Competition.
- 12.3 Small and Micro Business Assessment** – Whilst these proposals primarily benefit private pilots, they also affect certain flying instructors who use non-EASA aircraft. These will almost entirely be small and micro businesses.
- 12.4 Justice Impact Test** – Option 2 should have no impact on justice.
- 12.5 Sustainable Development**

The Government Guiding Principles on Sustainable Development are:

- **Living Within Environmental Limits:** Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations.
- **Ensuring a Strong, Healthy and Just Society:** Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all.

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- **Achieving a Sustainable Economy:** Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.

- **Using Sound Science Responsibly:** Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.

- **Promoting Good Governance:** Actively promoting effective, participative systems of governance in all levels of society engaging people's creativity, energy, and diversity.

Option 2 would have no effect upon achievement of the principles for sustainable development.

**12.6 Carbon Assessment** – Option 2 would have no impact on greenhouse gas emissions.

### **12.7 Other Environment**

13.6.1 **Noise pollution:** Option 2 would have no impact on noise pollution.

13.6.2 **Air quality:** Option 2 would have no impact on air quality.

**12.8 Health Impact Assessment** – Option 2 should have no impact on health.

### **12.9 Equality Impact Tests**

The following impact tests have been considered. Option 2 will be implemented equally across all groups regulated by the CAA regardless of their race, age, sexual orientation, ethnic origin, disability or gender. As a result we anticipate there will be no impact with regard to the following:

- race equality
- disability equality
- gender equality
- human rights.

**12.10 Rural proofing** – Option 2 should have no specific rural impacts.

**12.11 Family Impact Test** – Option 2 is not expected to impact on families.

## **14 Summary and preferred option with description of post implementation review**

14.1 The preferred option is Option 2. This allows us to reduce the regulatory burden proportionally whilst maintaining the current high standard of safety.

14.2 The ANO is reviewed regularly, primarily to check that the legal text remains fit for purpose. No specific review of these proposals has been planned, but the CAA will continue to keep GA sector under review, through monitoring activity in the sector and regular meetings of the General Business and Aviation Strategic Forum (attended by the CAA and GA industry stakeholders) which currently meets quarterly.