Appendix B – Options for Addressing the cost of pilot training; Online Survey

## PANEL SURVEY QUESTIONS

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## **COVERING EMAIL**

The government would like to work with the aviation industry to **understand more about potential** measures to increase the number of commercial airline pilots in the UK.

SYSTRA Ltd has been commissioned by the Department for Transport to undertake a study to assess the **level of supply of qualified pilots relative to demand** over the coming years, and the range and merits of potential **alternative models for funding cadets' pilot training**.

The findings of the study will provide key evidence to inform decisions on government policy on funding models for pilot training.

The attached letter from David Harding, Deputy Director, General Aviation, Safety, Skills and CAA for the DfT explains more about the study and why it is important to the government at this time.

We would be most grateful if you would take part in this study by completing a questionnaire using the link below. It should take around 30 minutes to complete. The questionnaire should be completed by someone who can answer questions on:

- Current and future requirements for commercial pilots;
- Views on addressing any potential future shortage of qualified commercial pilots relative to demand; and
- Views on current and potential alternative financial models for addressing the high cost of pilot training.

The deadline for completion is [date].

Thank you in anticipation for your help

## INTRODUCTION

The government would like to work with the aviation industry to improve accessibility of training to become a commercial airline pilot, and attract people from a diverse range of backgrounds into the profession.

We are very grateful to you for responding to this questionnaire, which will help the Department for Transport understand more about the current and prospective pilot demand relative to supply that potentially could have an impact on the UK aviation sector. In particular the survey will gather evidence on:

- Current and future requirements for commercial pilots;
- Views on addressing any potential future shortage of qualified commercial pilots relative to demand; and
- Views on current and potential alternative financial models for addressing the high cost of pilot training.

This survey forms part of a wider study being undertaken by SYSTRA Ltd and Northpoint Aviation, to assess the level of supply of qualified pilots relative to demand over the coming years, and the range and merits of potential alternative models for funding cadets' pilot training.

The findings of the study will provide key evidence to inform decisions on government policy on funding models for pilot training.

To continue with the survey, please click 'Next'.

## **SECTION 1: PROFILING QUESTIONS**

We would like to start by asking a few questions about your organisation.

Q1	Please specify which of the following best describes your organisation.			
QI	(Please tick all that apply) [Multi select]			
а	Airline - UK Passenger			
b	Airline - Non-UK passenger			
с	Airline - Cargo			
d	Airline - Business aviation			
e	Air operator - Wet or dry lease			
f	Air operator - Rotary			
g	Air operator - Potential future AAM			
h	Air operator - Special Mission (e.g. Emergency services, military contractor, etc.)			
i	Training provider - University			
j	Training provider - Flying school			
k	Recruiter - UK			
I	Recruiter – non-UK			
m	Other - Training funder (specialist or general loans/debt funding including student loans)			
n	Other - Airport			
0	Other - Union			
р	Other - Trade Association			
q	Other - Political Representative or Lobbying Organisation			
r	Other (please specify)			

"If you selected "other", please describe your organisation.

Q2	Please specify which of the following activities your organisation undertakes			
ųΖ	(Please tick all that apply) [Multi select]			
а	Provide employment to pilots			
b	Recruit pilots for other organisations			
с	Fund pilot training			
d	Train pilots - ground/desk based training			
e	Train pilots - airborne flight schooling			
f	Train pilots – simulator based			
g	Maintain pilot licenses and/or facilitating changes to their type rating			
h	Another activity relating to attracting / training pilots / looking after (please specify)			
i	None of the above activities relating to pilots			

If none of the above represent the activities your organisation undertakes, please specify below.

Q3	How many pilots does your organisation employ, either as direct employees or contractors (including full or part time employees)? [single select for each column]			
		Direct employees	As contractors	
а	0			
b	1-10			
с	11-50			
d	51-100			
e	101-250			
f	251-500			
g	500-1,000			
h	1001-2000			
i	2000+			

### [Only ask Q3 if Q2=a – provide employment to pilots]

Q4	Please provide name of your organisation. You may leave this blank. Please note, no information will be attributed to your organisation, your answers will remain anonymous and answers from all responses will be reported in aggregate. However it will help is to ensure that we do not have more than one response from any single organisation. [single select]
а	Enter name:

If Q2 ≠ a skip to section 3 (Q11)]

## **SECTION 2: CURRENT PILOT REQUIREMENTS**

[This section is only for those who employ pilots i.e. if Q2=a]

#### We would now like to ask a few questions about your current requirements for pilots.

Q5	Are you currently able to operate the schedule you would like to be able to offer? (Please tick one) [Single select]
а	Yes
b	No

#### Only ask Q6 if Q5 is no

Q5b	You said that you aren't able to operate the schedule you would like to offer. To what extent is this for each of the following reasons? (Please tick one per row) [Single select]				
		To a great extent	To some extent	Not at all	
а	Lack of ground staff				
b	Lack of aircraft				
С	Lack of pilots				
d	Other (please specify)				

	We are interested in the extent to which you are short of pilots now, or the extent to which you anticipate being short in the future.			
	Please can you indicate the of:	approximate number and percentage of pilots you are short		
Q6	<ul> <li>a. to run your current schedule</li> <li>b. to be able to operate the schedule you would like to be able to offer this summer</li> <li>c. to run a full post COVID schedule (i.e. normal market conditions – say in 2025)</li> <li>d. to run an optimum schedule in 2030</li> <li>[free text, numeric]</li> </ul>			
		Number of pilots short		
a	to run your current schedule			
b	to be able to operate the schedule you would like to be able to offer this summer			
С	to run a full post COVID schedule (i.e. normal market conditions i.e. in 2025)			
d	to run an optimum schedule in 2030			

[skip next question (Q7) if all answers to a,b,c,d are all 0]

# Are these shortages associated with any particular type of aircraft?Q7(Please tick all that apply for each column)[Multi select for each column, unless n is selected in which case single select]

		(a) to run current schedule	(b) to operate desired schedule this summer	(c) to run a full post COVID schedule i.e. in 2025	(d) to run an optimum schedule in 2030
а	Turboprop Aircraft				
b	E170/190 Family				
с	Airbus 220				
d	Other Regional jets				
е	A320 Family				
f	B737 Family				
g	Other narrow bodied jets				
h	Wide-bodied twin engine Aircraft (Boeing or Airbus)				
i	Wide-bodied 4-engined aircraft				
j	Cargo aircraft				
k	Rotary Aircraft				
I	Business Jet Aircraft				
m	Other Aircraft (please specify)				
n	No specific aircraft type				

Q8	How many vacancies do you currently have for the following types of pilots and trainee pilots? Please be assured this information is only used to inform this study and will not be attributed to your organisation. [free text, numeric]		
а	Captains		
b	First officers		
С	Second officers		
d	Training captains		
e	Pilot cadets / trainees		

Q9	Considering the pilots that you hope to offer employment to, which have been recruited/will be recruited by you (and/or recruitment specialists you use), using the following methods: [Multi select]				
		(a) Methods used to recruit pilots in the past 5 years.	(b) Methods currently being used to try and fill current/recent pilot vacancies	(c) Methods you anticipate using to find pilots over the next ten years.	

а	Pilots out of retirement		
	Thous out of retirement		
b	Pilots from overseas		
с	Pilots from other airlines		
d	Pilots from the military		
е	Trainee pilots from the UK		
f	Trainee pilots from overseas		
g	Methods aimed at attracting more female/ethic minority recruits		
h	Advertise		
i	Cadet programmes		
j	Other recruitment methods (please specify)		

If you selected other recruitment methods, please specify.

Q10	Which of the following a. Do you currently have Have you had in the past [allow selection of a, b, a&b, or c]				
		Have currently	Have had in the past		
а	Cadet Programme				
b	Sponsorship for trainee pilots				
С	Neither				

[If yes to (a) current or past] Please can you provide more details on the cadet scheme, e.g numbers enrolled, background of those enrolled, what went/is going well and not so well, and anything else [If yes to (b) current or past] Please can you provide more details on the sponsorship offered e.g numbers enrolled, background of those enrolled, what went/is going well and not so well, and anything else

- [If (a) no currently and yes in the past] Why do you no longer offer a cadet scheme
- [If (b) no currently and yes in the past] Why do you no longer offer sponsorship
- [If (a) no currently and no in the past] Why don't you offer a cadet scheme
- [If (b) no currently and no in the past] Why don't you offer sponsorship

## SECTION 3: FUTURE PILOT REQUIREMENTS & ADDRESSING THE GAP

The next questions are about your thoughts on future requirements for pilots, and on addressing any potential future shortage of qualified commercial pilots relative to demand.

	Concerning the availability of pilots in the future, what are your thoughts on pilot requirements —in the next year in five years and in ten years?
Q11	<ul> <li>(a) In your organisation (if Q2=a only)</li> <li>(b) In the UK</li> <li>(c) Worldwide</li> </ul>
	(Please tick one option for each funding route for a and b) [single select per question per row]

## A, b and c only to be asked to those that employ pilots ie Q2=a

		Large shortfall	Small shortfall	No shortage or surplus	Small surplus	Large surplus	Don't know
а	In your organisation – next year						
b	In your organisation – in 5 years						
с	In your organisation – in 10 years						
d	In the UK – next year						
е	In the UK – in 5 years						
f	In the UK – in 10 years						
g	Worldwide – next year						
h	Worldwide – in 5 years						
i	Worldwide – in 10 years						

Skip next question (Q12) if none of Q11 a-i are large shortfall or small shortfall

	What factors do you think						
Q12	<ul><li>(a) Contribute to current and potential future shortages of pilots? (tick all that apply)</li><li>(b) Are the top three reasons for potential future shortages of pilots? (tick up to three)</li></ul>						
	[multi select for a, select up to 3 for b]						
		Factors that contribute	3 most significant factors				
а	Cost of pilot training to trainees						
b	Lack of training schools / places at training schools						
с	Lack of instructors providing flight training						
d	Pay levels for flight instructors						
e	Pay levels for new pilots vs cost of training						
f	Lack of airlines sponsoring pilots						
g	Loss of pilots during Covid-19						
h	Restrictions on UK licence holders being able to fly in Europe						
i	Lack of overseas pilots wanting to come to UK since Brexit						
j	Lack of overseas pilots able to come to UK since Brexit						
k	Age profile of pilots - many now reaching at retirement age						
I	Not reaching out effectively to all population groups (e.g. Women, ethnic minorities)						
m	Not enough interaction with schools (STEM, careers)						
n	New forms of aviation – drones/e-VTOL creating additional demand for pilots						
	Lack of retiring military pilots						
0	Other (please specify)						

If you selected other, please specify what factors you think most contribute to current and potential pilot shortage.

## **SECTION 4: PILOT TRAINING FUNDING MODELS**

We would now like to ask you some questions about your views on current and potential alternative financial models for addressing the cost of pilot training, as well as some other ways helping to deliver the UK's current and future needs for pilots.

#### Q13 for those employing pilots only i.e. where Q2=a

Q13	We have identified a number of methods used for funding pilot training in the UK or elsewhere. Please identify which of the following funding methods have been used (fully or in part) by pilots you employ					
	(Please tick one option for each funding route) [single select per question p	per row]				
		Yes, frequent ly	Yes, occasionally	No		
а	Self- funding through family/friends (gifts)					
b	Self-funding through family/friends (loans)					
с	Self-funding through personal savings					
d	Self-funding through working whilst training					
e	<b>Self-funding</b> through commercial loans, including from specialist lenders (e.g. Pegasus)					
f	<b>Apprenticeship</b> - First Officer Apprenticeship approved by Institute for Apprenticeships and Technical Education in 2019					
g	Apprenticeship/cadetship – sponsored by UK airline					
h	Apprenticeship/cadetship – sponsored by overseas airline					
i	Apprenticeship/cadetship – sponsored by other aircraft operators/organisations (specify who)					
j	<b>Apprenticeship/cadetship</b> – sponsored by charities, universities or other sources (specify who)					
k	Apprenticeship/cadetship – funded by full/partial government grants					
I	Apprenticeship/cadetship – funded by full/partial government loans					
m	<b>Apprenticeship/cadetship</b> – alternative funding (e.g. schemes involving bonded period to sponsoring employer)					
n	<b>University</b> providing access to <b>student further education loans</b> during flight training year					
0	Military training and conversion at conclusion of military service					
р	<b>Other funding models</b> to reduce the cost of training as a barrier to entering the profession (e.g. scholarships, prizes, (specify)					

If you selected other funding models or other sources of funding for an apprenticeship/cadetship, please specify which model/source.

	(where Q2≠a) We have identified a number of routes used for funding pilot training in the UK or elsewhere. Please identify:									
	<ul> <li>(where Q2=a) Thinking about these same funding routes again, please identify:</li> <li>a. How effective you consider each of the following funding routes would be in helping to deliver the UK's current and future need for pilots, in the short, medium and long term?</li> <li>(Please tick one option for each funding route for short medium and long term)</li> <li>b. Which do you think would be the three most important funding routes in helping to deliver the UK's</li> </ul>									
Q14										
	current and future needs for pilots (please tick up to 3)	over t	he nex	t 5-10 ye	ears?					
	[single select per question per row]									
			term effeo few years				1	Medium term effectiveness (5-10 years)	Long term effectiveness (10+ years)	3 most import ant in next 5- 10 years
		very	A little	Neither	Not very	Not at all	Don't know	Same 6 categories	Same 6 categories	
a	Apprenticeship-FirstOfficerApprenticeshipapprovedbyInstituteforApprenticeshipsandTechnicalEducationin2019									
b	<b>Apprenticeship/cadetship</b> – sponsored by UK airline									
с	Apprenticeship/cadetship – sponsored by overseas airline									
d	Apprenticeship/cadetship – sponsored by other aircraft operators/organisations (specify who)									
e	<b>Apprenticeship/cadetship</b> – sponsored by from charities, universities or other sources (specify who)									
f	<b>Apprenticeship/cadetship</b> – funded by full/partial government grants									
g	<b>Apprenticeship/cadetship</b> – funded by full/partial government loans									
h	<b>Apprenticeship/cadetship</b> – alternative funding (e.g. schemes involving bonded period to sponsoring employer)									
i	<b>University route</b> providing access to <b>student further education loans</b> during flight training year									
j	Military training and conversion at conclusion of military service									
	Other funding models to reduce the cost of									
k	training as a barrier to entering the profession (e.g. scholarships, prizes, (specify)									

b. c. d.	the pros and cons including why it may or may not work in the UK which countries use this model any further information you are aware of that we can access on this funding model

	If you have any <u>other ideas for methods for funding</u> , including ideas <u>from other industries</u> <u>or specialist operational/licensed trades</u> in similarly skilled, certified and responsible operational jobs please describe this below, as well as where this model of funding is used if applicable. Examples include: air traffic controllers, military aircraft, train drivers, bridge-level officers on ferries and other forms of marine transport. Please describe:
Q16	a. how this model works
	b. the pros and cons including why it may or may not work for pilot training in the UK
	c. which countries use this model
	d. any further information you are aware of that we can access on this funding model

#### Next 3 questions (Q18-Q20) only to be asked to those that employ pilots ie Q2=a

Q17	Have you ever considered offering the First Officer Apprenticeship? [single select]
а	Seriously considered but decided against
b	Briefly considered but decided against
с	Currently considered
	Not aware of it
d	Not considered

Q18	Which of the following would encourage your airline to offer the First Officer Apprenticeship? [multi select]			
а	Nothing would encourage me to run the First Officer Apprenticeship			
b	Being able to combine financial support from DfT in the form of grant funding			
с	Being able to put in place conditions about how long the pilot needs to remain with the airline once qualified			
d	Other (specify)			

If you selected other, please explain what would encourage your airline to offer the First Officer Apprenticeship

#### Only ask Q20 If Q19=a

Q19		Why would nothing encourage your airline to run the First Officer Apprenticeship?				

#### Only ask Q21 if Q19=b

Q20 What is the minimum grant funding that would be required per apprentice to encour your airline to run the First Officer Apprenticeship?		e

	We have identified a number of things for you to consider, other than funding methods for pilot training may potentially help to deliver the UK's current and future need for pilots. Please identify:									which			
Q21	<ul> <li>b. How effective you consider each of the following would be in helping to deliver the UK's current and future need for pilots, in the short, medium and long term? (Please tick one option for each funding route for short medium and long term)</li> <li>c. Which do you think would be the three most important things to deliver the UK's current and future needs for pilots over the next 5-10 years? (please tick up to 3)</li> <li>[single select per question per row]</li> </ul>												
		Short term effectiveness (next few years)						Medium term effectiveness (next 5-10 years)	Long term effectiveness (10+ years)	3 most import ant in next 5- 10 years			
		very	A little	Neither	Not very	Not at all	Don't know	Same 6 categories	Same 6 categories				
a	More recruitment of other nationalities sponsored by their Governments/other national sources												
b	Extending age existing pilots can fly until (e.g. from 65 to 67 years)												
с	Enabling UK licence holders to also fly for EU airlines (EASA Certificated)												
d	Enabling overseas pilots easier access to UK employment												
е	More military transfers												
	Job share (e.g. working part-time as a commercial pilot whilst in the military)												
f	New recruitment methods (specify)												
g	More apprenticeships / cadetships												
h	More flight schools / places at flight schools												
i	Novel training course structures (e.g. qualifications gained over a longer period and/or greater use of simulators)												
j	Reduction in flying hours (from current requirements) to become fully qualified to fly commercial airlines												
k	Better pay for flight instructors												
I	Salary-sacrifice schemes												
m	Removal of VAT on flight training												
n	Automation of certain activities (e.g. air traffic interface), introduction of e-VTOL/c-VTOL aircraft												
0	Other (please specify)												

If you selected other, please specify what you think would help deliver the UK's current and future needs for pilots.

## SECTION 5: FURTHER INFORMATION AND RESEARCH

Finally, we would like to ask about any information you think would be useful to this study, and whether you would be interested in taking part in any further research.

	We would be grateful if you can identify any studies, reports, academic articles or data sources that you think might be useful to us in undertaking our work, specifically regarding
Q22	<ul> <li>a. Existing commercial pilots (e.g. Age, Rank, Type Rating,)</li> <li>b. Future pilot requirements/demands</li> <li>c. Pilot supply/demand bottlenecks / potential for future pilot shortages</li> <li>d. Alternative pilot training funding models from UK/other countries/similar industries</li> <li>e. Options for addressing the cost of pilot training through different funding models</li> </ul>
	Please write in below any information that may be helpful and where we can source it, or provide a URL link.

	Would you be interested in taking part in further research on this subject by taking part in an in depth telephone or online discussion with one of our team?
Q23	If you would like to be considered for this, please provide your contact details below. These details will not be linked to any responses you have provided as part of this survey and your details will be kept securely.
	Name:
	Position:
	Organisation:
	Email:
	Telephone number (optional):

Q24	Finally, if there is anything else which you wish to say in relation to the topics that have been discussed, please do so here.			

#### Close

Thank you very much for taking the time to complete this survey.

This findings will form part of a wider study to assess the level of supply of qualified pilots relative to demand over the coming years, and the range and merits of potential alternative models for funding cadets' pilot training.

The study will provide key evidence to inform decisions on government policy on funding models for pilot training.