

<b>Title:</b> Noise controls and Noise Preferential Routes (NPRs) at designated airports <b>IA No:</b> DfT00393 <b>RPC Reference No:</b> Not applicable <b>Lead department or agency:</b> Department for Transport <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>			
	<b>Date:</b> 02/08/2017			
	<b>Stage:</b> Final (validation)			
	<b>Source of intervention:</b> Domestic			
	<b>Type of measure:</b> Other			
<b>Contact for enquiries:</b> Laura Parish (laura.parish@dft.gsi.gov.uk)				
<b>Summary: Intervention and Options</b>				<b>RPC Opinion:</b> Not Applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANDCB in 2014 prices)	One-In, Three-Out	Business Impact Target Status
-£2.0m	-£2.0m	N/A	N/A	N/A

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

Government is currently responsible for setting various operational noise controls at the three designated airports (Heathrow, Gatwick and Stansted). Intervention is necessary since many of these controls have not been updated for decades, partly due to the lengthy nature of the current process, and the controls therefore no longer reflect what improvements in terms of reducing noise impacts might be possible at these airports. In response to this, in recent years, airports have begun to engage with stakeholders and propose changes to noise controls to government for approval, reducing the need for government to proactively consult on changes.

It is Government policy that noise is best managed locally and that airports can better respond to local concerns and environmental factors. There is no rationale for Government to set controls where other airports do locally.

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

- A move to a system where designated airports can propose changes to these noise controls, to be approved by Government is expected to lead to quicker and more reactive policy changes to local issues, resulting in better noise conditions for communities.
- Continuing the potential for the development of better and more innovative noise controls for airports and communities that are tailored to local needs, as a result of local engagement in noise management.
- Increased transparency and understanding of noise controls by communities. Communities should trust that noise conditions will not worsen as a result of any changes. All changes must therefore be enforceable.

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

The impact on industry of these changes is expected to be minimal, and the policy would bring the designated airports closer in line with noise controls set at all other airports. It shall be the responsibility of the airport to develop options for enhancing noise controls and adjusting NPRs, and providing they can demonstrate sufficient consultation, Government would not expect to prevent these changes. Approved changes should benefit communities and reflect the airports' own operational environments. Airports would determine the precise air traffic information provision they would publish, which would require a slight revision to guidance.

When a suitable opportunity arises involving a planning application being made by one of the three airports, transferring ownership of the controls would be considered, likely to the local planning authority. At the moment, there is not sufficient trust between the airports and communities to fully transfer responsibility and there are no enforcement mechanisms available in respect of noise controls in at the designated airports, other than those set by Government. Government oversight ensures the lack of trust is accounted for and that any changes are enforced.

Will the policy be reviewed? Only where full de-designation becomes a viable option, or if there is an opportunity to amend the legislation to tackle the enforcement loophole.

<b>Does implementation go beyond minimum EU requirements?</b>			N/A			
<b>Are any of these organisations in scope?</b>			Micro No	Small No	Medium No	Large Yes
<b>What is the CO<sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO<sub>2</sub> equivalent)</b>			Traded: N/A		Non-traded: 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 :** ..... Enter a date

# Summary: Analysis & Evidence

# Policy Option 1

Description: Airports sponsoring changes to noise controls and NPRs

## FULL ECONOMIC ASSESSMENT

Price Base Year: 2017	PV Base Year: 2018	Time Period Years: 10	Net Benefit (Present Value (PV)) (£m)		
			Low: NQ	High: -4.0	Best Estimate: -2.0

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	NQ	1	NQ	NQ
High	<0.1		0.5	4.0
Best Estimate	<0.1		0.2	2.0

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

**Airports:** Annual costs resulting from increased work liaising with the Department on proposed changes, estimated at £200,000 per year across the three airports. In addition, quarterly publications of data required under the policy are estimated to produce costs of £29,000 in total. These relatively low costs reflect the proportionate nature of the policy – much of the consultation work and data collection is expected to take place through existing channels. There are also expected to be one-off familiarisation costs of the understanding these changes and of reading any new Air Navigation Guidance in the first year. The transition cost is expected to total less than £1,000.

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

**Local communities:** The government maintaining an approval role could complicate understanding to communities of who is responsible for these changes. This is particularly true given that for noise controls, designated airports would still be treated differently from other airports despite the controls being largely the same. However, this results from a legal requirement for the Department to be ultimately responsible for changes at the designated airports.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	NQ	1	NQ	NQ
High	NQ		NQ	NQ
Best Estimate	NQ		NQ	NQ

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

None expected.

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

**Local communities:** The policy is expected to lead to a reduction in the amount of time taken for potential improvements in noise conditions around the airports for communities. Noise controls via the new system are expected to be better and more innovative, tailored to local needs, as a result of local engagement in noise management. In addition, by maintaining a Government role in approving changes, communities can be confident that noise conditions will not worsen versus the current situation. Finally, the policy is expected to lead to increased community understanding of the role of NPRs, since they are known to be misunderstood currently.

**Designated airports:** The announcement of the intention to transfer ownership of NPRs and noise controls when planning arrangements permit would provide designated airports with confidence that they will be given the same powers over noise controls as other airports in the future. There is also a potential increase in revenues from fines of airlines, along with a reduction in complaints as a result of improved understanding of NPRs and noise controls.

**Wider industry and consumers:** Providing potential for proposals on removing or significantly updating NPRs could be highly advantageous for future airspace modernisation.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
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Cost assumptions are uncertain due to the difficulty in predicting around how airports would respond to this deregulation. Since airports have already started to sponsor changes for improvement in recent years, it is not possible to know how many of these new proposals would be as a result of the change in regulation. An airport would not sponsor a change unless benefits of the change exceed costs. This would be the case regardless of the costs. We assume that this regulatory change would not result in an increase in the number of changes, but they may be sponsored earlier since there would now be quicker approval. As a result of this uncertainty, all assumptions on costs are very conservative, thus costs included are likely to be higher than any costs would be in reality.

## BUSINESS ASSESSMENT (Option 1)

<b>Direct impact on business (Equivalent Annual) £m:</b>	<b>Score for Business Impact Target (qualifying provisions only) £m: -£0.29m</b>	
Costs: N/A	Benefits: N/A	Net: N/A

# Evidence Base

## 1 Background and current system

- 1.1 The Government is currently responsible for setting various non-operating restriction noise controls and Noise Preferential Routes (NPRs) at the designated airports (Gatwick, Heathrow and Stansted). Noise controls include departure noise limits and requirements for aircraft in terms of minimum altitudes and angle of climb or descent.
- 1.2 NPRs at the designated airports are set and 'owned' by the Government and have existed since the late 1950s, when the airports were in public ownership. NPRs at the designated airports have acted as an important noise control measure in that the standard instrument departures at the designated airports have to be based around them. Originally, the NPR was a line on a map drawn which attempted to minimise the number of people overflowed by departing aircraft, but in 1991 it was decided to add a 1.5km swathe to each side of the line to help with assessing track keeping performance. They were intended to provide communities with information and assurance on where overflight aircraft can be expected to be seen or heard. A number of other UK airports have adopted NPRs, either voluntarily or through planning agreements.
- 1.3 Currently, noise controls and amendments to NPRs are prompted for review by government only when there is substantial lobbying or complaints from communities or airports. The government would then hold a consultation on various options, during which stakeholders would submit proposals. Then the government would make a decision and implement the change. This is sometimes a lengthy process. In the case of NPRs, the last time a consultation was carried out by government was in 1989, and changes to noise controls tend to be infrequent.

## 2 Problem under consideration and policy objectives

- 2.1 Many of these noise controls have not been updated for a number of years and may not reflect what improvements might be possible at these airports. The NPRs have remained fixed for many years as have many of the noise controls. There are issues with NPRs in particular, including their failure to be updated over decades despite significant changes in land use development, and a lack of community understanding about their purpose. This means there is a rationale to ensure that noise controls are tailored towards local needs to result in improved outcomes for communities and airports. This should occur as a result of engagement with communities and stakeholders for any proposed changes.
- 2.2 The current system is also lengthy since any changes have to adhere to the processes concerning government regulation, such as being subject to impact assessment. This means that noise management is not currently reactive to local changes. This results in noise controls that may not reflect what improvements might be possible at these airports. If the designated airports were to have more control over when these controls were changed, they could be more reactive to local concerns and issues.
  - 1) **Quicker and more reactive policy changes to local issues, resulting in better noise conditions for communities.**
  - 2) **Continuing the potential for the development of better and more innovative noise controls for airports and communities that are tailored to local needs, as a result of local engagement in noise management.**
- 2.3 There is also a rationale to improve the transparency of airport operations between airports and their local communities, since it was determined that NPRs had ceased to be understood properly by

communities. Allowing airports to propose to change and potentially remove NPRs would increase understanding of the noise and visual impact of aviation by simplifying the information provision and improve community relations by facilitating a greater degree of local accountability. In the long term, removal, or the use of more flexible arrangements for NPRs, would assist the airports in devising new airspace arrangements which can not only improve efficiency of their operations but also mitigate the impact of noise disturbance on communities.

### **3) Increased transparency and understanding of noise controls by communities.**

2.4 The designated airports have distinct business models and patterns of operation. It has therefore become less appropriate to have common noise controls at the designated airports. It is Government policy that noise is best managed locally and that airports are better placed to respond to local concerns and introduce measures that reflect their own operational environments and constraints. There is no rationale for the Department to maintain responsibility for setting these controls while other major airports manage these locally in consultation with communities, often as part of planning decisions. However, there is a need to maintain trust with communities that noise conditions cannot get worse compared to currently. Under current legislation, the airports have no enforcement powers for changes they introduce themselves while they are designated. Thus, enforceable controls would require an approval role for government.

### **4) Communities should have trust that noise conditions cannot get worse compared to currently as a result of any changes. All changes to noise controls must be enforceable.**

2.5 The majority of consultation responses relevant to the noise control proposals disagreed that airports should assume responsibility for these controls. The most common reason for doing so was that the airports had no incentive to prioritise the interests of their communities by introducing controls that would disadvantage their customers; airlines. While many of the responses recognised that the current controls were not as effective as they could be, they disagreed that the solution was for the government to transfer responsibility for these to the designated airports. A large number of responses felt there was actually a case for greater government involvement and regulation, while other suggestions included an ability for local authorities to impose controls outside of the planning process, or for another body such as the Independent Commission on Civil Aviation Noise (ICCAN), the Civil Aviation Authority (CAA), or airport consultative committees to have an approval role for any changes.

2.6 Having considered these responses, the government accepts that it is not only important for communities that the right noise controls are in place, but also that they can have faith that these controls will not be watered down in the future. We therefore amended our initial proposals in this area and will not transfer responsibility for noise controls to the airports, at least in the immediate term. Instead, the government will maintain an approval role for any changes, but we do expect airports to take responsibility for developing and proposing any changes by working with their communities to identify options that they can put forward for government approval. This approach is consistent with what has already begun to happen at the designated airports in recent years.

2.7 With regard to the proposal to improve transparency between airports and their local communities by airports publishing regular information on airport operations, this received substantial support with almost no objections. However, there were a few concerns raised concerning what was going to be done with the information that was gathered and published, whether it would lead to more effective enforcement action against the airport, and on the specific requirements. There were also some suggestions about the type of information that should be published, and whether it would be made mandatory and independently audited. From this feedback, the Department decided that airports would be enabled to determine the precise information they would publish; this would require a slight revision to the air navigation guidance. It was also decided that further consideration would be given to whether ICCAN should have a role, for example in some form of audit capacity. This should go some way to meeting the concerns expressed in the consultation on the information requirements.

2.8 Some respondents also mentioned the efforts made by a number of airports already to provide suitable information to their communities. This informed the decision to not make the information

requirements mandatory, since airports are already publishing this information in absence of regulation, and are aware of the information most relevant to local communities.

### 3 Policy proposal

- 3.1 The Department will not be responsible for updating operational noise controls or NPRs at the designated airports (the proposal does not apply to operating restriction controls such as night flight restrictions) and would expect these airports to work with their communities to put forward any proposals to change for approval. Government would expect to approve this change if it has been demonstrated that there has been appropriate consultation. This approach is consistent with what has already begun to happen at the designated airports in recent years. The Government would announce the intention to transfer ownership of noise controls when planning arrangements permit. This would enable the transfer to be not to the airport but to the relevant local planning authority to ensure controls are enforceable. The approval role of government, followed by the eventual transfer to local planning authorities would mitigate the issues raised in the consultation about the lack of trust in airports being responsible for these controls.
- 3.2 As changes to some noise controls already require approval from the CAA as airspace regulator, these changes do not also require Government approval if the CAA is content that the changes reflect the outcome of consultation with communities. The role of the CAA is unchanged compared to under the Do Nothing.

A slight revision to the air navigation guidance by the Department would be required, stating that airports would be able to determine the precise information they would publish. The guidance will not be statutory because it is expected that the designated airports will follow the air navigation guidance as there is a benefit to be gained from improved community relations. Plus, the airports already publish some of this data. However, since the guidance is not statutory, there is a risk that airports would not follow the guidance and in this case, further consideration could be given to whether ICCAN should have a role in some form of audit capacity.

### 4 Costs and benefits – central estimates

**Table 4.1.1: Expected annual costs to the designated airports under the central case (rounded to 2 significant figures and in 2017 real prices)**

	<b>Costs (rounded to 2sf)<sup>1</sup></b>	
	<b>Per airport</b>	<b>All airports</b>
<b>Staff costs of a DfT liaison manager</b>	£67,000	£200,000
<b>Staff and administrative costs of publishing information on a quarterly basis</b>	£9,800	£29,000
<b>Familiarisation costs (only occurring in year 1)</b>	<£1,000	<£1,000
<b>TOTAL</b>	£78,000	£230,000

- 4.1 This policy applies only to the designated airports (currently Heathrow, Gatwick and Stansted). These policy changes are unlikely to result in large impacts upon the airports compared to the Do Nothing, since the approach is consistent with what has already started to happen at the designated airports in recent years. Because of this, it is possible that the airports are already proposing all of the changes they feel are necessary and this policy change is unlikely to have an impact on industry

<sup>1</sup> Costs may not sum exactly since estimates are rounded to two significant figures to reflect uncertainty.

behaviour compared to the Do Nothing. More detail on the assumptions for the costs can be found in section 5. However, there may still be some costs to the designated airports:

**a) Increased staffing costs as a result of extra engagement with the Department when sponsoring changes to government.**

- Increasing the level of responsibility airports have in noise management isn't expected to result in significant changes to the behaviour of the designated airports. It is not expected to lead to any increase in the number of changes proposed by airports over the time period.
- The process is designed to be proportionate, and there are already mechanisms, such as statutory required consultative committees, in place at each airport to handle the engagement that would be required in most circumstances. There are also decision making bodies at Gatwick and Heathrow. Expectations of the level of consultation airports would be expected to demonstrate are no different compared to that shown in proposals currently.
- In cases where the airport thought a change would result in the costs of engagement that are too large compared to the expected benefits, it would simply not bring that change forward, in the same way as it would not happen now.
- This change would not result in any difference in the number of proposals because if benefits exceed the costs, the airport would have proposed the changes in the counterfactual anyway. No proposal would be brought forward now that would also not have been brought forward under the Do Nothing.
- The airports also already currently respond in detail to government consultations so the administrative burden of pulling together sponsored changes would be little different compared to current process of responding to government consultations or proposing changes now. This also proves that the expertise and mechanisms are already in place for these administrative needs.
- It is assumed that there would be two proposals for change per year at each airport, requiring staffing costs of one FTE manager to liaise with the Department for Transport, meaning an annual average of £200,000 per year across the three airports. This includes a wage uplift to account for any potential increases in administration for pulling together the proposal. This is a conservative assumption but represents what has started to be seen in recent years.

**b) Costs of publishing information as outlined in the updated Air Navigation Guidance**

- Whilst it is expected that the designated airports will follow the air navigation guidance for publishing information as there is a benefit to be gained from improved community relations, the guidance will not be statutory.
- We expect full compliance with this guidance given the importance of community relations to airports. It is also expected that airports already have much of the required data available to them and that they will publish data as outlined in the updated guidelines, especially given that some airports are already publishing this information in absence of regulation.
- While the mechanisms for collecting the data are already in place, there may be direct costs in developing the data into useable information and making it accessible to communities.

**c) Transition costs of airports familiarising themselves with the changes**

- A manager would be required to understand the new system for proposing changes, along with reading the new Air Navigation Guidance when updated.

**d) The government maintaining an approval role could complicate understanding to communities of who is responsible for these changes**

**e) The approval role for government would still see the designated airports being treated differently from other airports despite the controls being largely the same**

4.2 There are expected benefits to the airports and communities of the proposed change, however it is not possible to monetise any of these due to uncertainty around the measures that may be introduced as a result of the changes:

**a) A reduction in the amount of time taken for improvements to noise controls to be made.**

- Increasing the level of responsibility that airports have in noise management would reduce the need to adhere to the processes concerning government regulation. This would lead to a reduction in bureaucracy and changes that improve noise conditions would be made quicker than under the Do Nothing.
- This would mean that changes that improve the noise conditions around airports would occur earlier, benefitting both communities and the airports.

**b) Maintaining a government role in approving changes ensures that communities are confident that noise conditions will not get worse than they currently are.**

- This would bring benefits to communities who do not trust the airports to act in their interest without a formal approver.
- Any increase in stakeholder engagement should improve community relations which should work to increase community trust in the airports in the long term.

**c) An increase in revenues from fines on airlines at the designated airports, along with a possible reduction in the number of complaints received as a result of improved noise controls.**

- These indirect costs and benefits would likely have monetised impacts on the airports, however, it is not possible to forecast exactly what changes the airports will make, how often these controls would be breached, how often the fines would be used, and also on the number of complaints that the airport would need to handle.
- However, the benefit to the airports would be a cost to the airlines paying the fines, so would fall on both sides of a cost benefit analysis and cancel out.

**d) Increased community understanding of the role of NPRs**

- It is known that NPRs are misunderstood by communities currently, so an indirect benefit of the update of the air navigation guidance should be that communities should understand the role of NPRs better than they currently. This information provision should result in benefits in the form of greater transparency to communities of where aircraft are actually flying, how often, and make it easier to spot changes over time.

**e) Providing potential for proposals on removing or significantly updating NPRs could be highly advantageous for future airspace modernisation**

- Since NPRs act as a significant barrier to airspace modernisation, by allowing the potential for proposals on removing or significantly updating them at some point in the future would unlock further opportunities for airspace change.
- This would have a large indirect benefit through improvements to noise conditions for airports and communities in the future regarding the number of people significantly impacted by noise.

**f) The announcement of the intention to transfer ownership of NPRs and noise controls when planning arrangements permit would provide the designated airports with further confidence that they will be given the same powers over noise controls as other major airports in the future.**

- This change in the future would bring them in line with the government opinion that noise is best managed locally.

## 5 Policy risks and sensitivities

5.1 We assume there would be two proposals on noise control changes per year at each airport. This is a conservative estimate since this is the maximum that any airport is intending to propose at the moment. It is expected that any proposals would also occur under the Do Nothing since the change would have to be beneficial overall for the airport for it to be proposed in both our proposal and the Do Nothing.

- 5.2 The process should be proportionate, and the Department does not expect large scale expensive consultation to be demonstrated in any proposals. Since the airports already have mechanisms in place for stakeholder engagement, we are estimating only administrative costs to business from liaising with and preparing proposals to the Department. We assume each proposal would require one FTE of a manager at £67,000 pa<sup>2</sup> (including overheads to account for capital costs). This estimate is based on staffing costs provided by the CAA in CAP 1389.<sup>3</sup>
- 5.3 We have assumed that some form of information as outlined in the updated Air Navigation Guidance would be published every quarter. Since it is expected that airports already have much of the required data available to them we have only included the staffing costs of reporting information, along with a 30% non-wage uplift to account for the capital overheads and costs of publication. We have assumed that a publication every quarter would require eight weeks of FTE<sup>4</sup> (320 hours) of a manager's time. This assumes two weeks (80 hours) required to produce each publication. Since some data is already published, this is a conservative assumption of the additional costs.
- 5.4 A high scenario involves three to four proposals for changes to noise controls per year at each airport. This is unlikely to occur consistently in every year since once a certain issue with a noise control had been updated it would not need to be updated for a few years unless local circumstances change drastically. There are many different types of noise controls but it is unlikely that all of these would be in need of changing over the period.
- 5.5 We assume this could require two FTE managers to liaise with the Department. Even under this scenario, costs would total £130,000 at each airport, or £400,000 per year. Given uncertainty in how often an airport would propose changes, we present breakeven analysis to assess the risk of reaching the £1 million cap. In order for the costs to increase to over £1 million per year, each airport would need to employ five FTE extra managers compared to what than they would in the Do Nothing. This is very unlikely to occur. As mentioned previously, the airports have already begun to propose changes so there is an argument that this resource already exists at the airports and would occur in absence of intervention.
- 5.6 As a high scenario, we assume that there will be a larger publication each quarter with more information, requiring 4 weeks of labour rather than 2 weeks. This is very conservative since some of this data would only ever be published annually. This would increase the costs of publishing to £59,000 in total per year.
- 5.7 The familiarisation costs are estimated at two hours of managerial wage plus a 20% non-wage uplift at each airport to account for capital overheads.
- 5.8 It has not been possible to monetise any benefits of this change due to their nature. The main indirect benefit is the long term impact of improving community relations and trust. This could unlock further opportunities for de-designating the airports in the future, and thus scope for further airspace modernisation which unlocks huge benefits.
- 5.9 To give an indication of potential scope, an airport's community relations can have huge influence on the decision whether to grant local planning permission or not. Poor community relations could potentially lead to a denial of a planning application, which would have brought billions of pounds worth of revenue to the airport and the economy. While this proposed change alone would not directly have this impact, it is a further step in helping the designated airports to improve trust with their communities.

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<sup>2</sup> Salaries are presented in 2017/18 prices

<sup>3</sup> Civil Aviation Authority. Consultation on proposals for a revised airspace change process. CAP 1389. March 2016. The assumption has been taken that a Department liaison manager would earn the same amount as a community engagement manager <http://publicapps.caa.co.uk/docs/33/CAP%201389%20March%202016.pdf>

<sup>4</sup> Office of National Statistics. Labour Force Statistics. August 2017. £23.45 gross weekly earnings for 'managers, directors and senior officials'. A standard 20% or 30% is added to any wage estimation to account for the employer paying taxes, pensions and/or capital overheads such as computing. We have assumed a 40 hour week.



- 5.10 Since the airport is not mandated to propose any changes, it is clear that shorter term benefits to be gained would always at least be the same as the costs of consulting on any changes. The airports would also factor in any increase in administrative costs to their engagement with the department.

## 6 Wider impacts

- 6.1 **Equality** - communities affected by aircraft are expected to benefit from this policy equally. The Department believes there are no race, gender or disability equality impacts.