Regulatory Policy Committee

Night Flight Restrictions at the Designated Airports, 2017-2022

Department for Transport

RPC rating: fit-for-purpose

Description of proposal

The IA explains that the central government is responsible for regulating night time aircraft traffic at three UK airports – Heathrow, Gatwick and Stansted. Since 1993, night noise has been managed by limiting the number of flights and the amount of noise that can be emitted between 11.30pm and 6:00am. The movement and noise quotas at these three airports were last adjusted in October 2014 and will expire in October 2017. Having completed the consultation process, the Department considered the following options in reaching the final policy decision:

- Option 1: Do Minimum. The current regime continues with no changes.
- Option 2: Incorporate QC/0[1] aircraft into movement limits for all three airports, and accommodate the number of currently exempt aircraft movements at Stansted by increasing the movement limit. These changes would take effect from the start of the next regime (Winter 2017).
- Option 3: As option 2, but further implementing a new QC/0.125 category to be introduced in the second year of the regime (Winter 2018). Aircraft from this category would be exempt from noise quota limits. Under the current regime the exemption applies to planes rated QC/0.25, i.e. noisier than QC/0.125.This means that in practice the number of exempt planes is likely to fall.
- Option 4: As option 3, but from winter 2018 to also reduce noise quota limits at Heathrow and Gatwick to a level based on the current average QC per movement. This removes 'headroom' in the current policy.

The Department has chosen to implement Option 4.

In response to consultation feedback the Department amended the objective of the policy. At the consultation stage the stated aim was to: "*encourage the use of quieter aircraft to limit or reduce the number of people significantly affected by aircraft noise at night, while maintaining the existing benefits of night flights*". Currently the policy's

[1] Quota Count – an aircraft classification based on the noise during take-off and landing; aircrafts quieter than 84 EPNdb(Effective Perceived Noise level in decibels) are currently rated QC/0 and are exempt from the night movement limits under existing system.

objective is to: '*limit or reduce the number of people significantly affected by aircraft noise at night, including through encouraging the use of quieter aircraft, while maintaining the existing benefits of night flights'*.

Impacts of proposal

The IA considers the following impacts of the policy.

Economic impacts on:

- Airlines
- Airports
- Air transport users
- Public accounts
- Wider economy

Other impacts related to:

- Noise pollution
- Air quality
- Climate change (including impacts on CO2 emissions)

Business impacts

The IA estimates impacts on two groups of businesses: airports and airlines.

The impacts of the proposal were estimated based on the average profitability per flight in the Night Quota Period (NQP) for different flight groups (based on carrier type, seat class, season, etc.). The airline profitability (operating margin) was defined as a difference between revenues from passengers and cargo, and "*the direct operating costs of the flights*". The equivalent measure for airports was estimated by subtracting airport operating costs from revenues from landing fees, airport charges and passenger expenditure at the airport.

The IA states that the number of night flights would decrease at Gatwick and Stansted by 465 and 2475 respectively over the 5 year period (the duration of the policy). The will be no change at Heathrow as its flights consist mainly of full service flights not affected by the policy. In addition, it is assumed that the number of night flights at Heathrow would not grow over the forecast period due to the lack of spare capacity. The tables below summarise the reduction in the number of flights and revenue at each airport.

Total Direct Costs to Business	2017/18	2018/19	2019/20	2020/21	2021/22
Gatwick	£0	£0	£2.18m	£1.57m	£2.49m
Heathrow	£0	£0	£0	£0	£0
Stansted	£0.41m	£1.12m	£1.29m	£1.40m	£1.41m

The IA disusses other impacts on businesses, including flight cancellations, changes to flights schedules and displacement of flights to different airports, but does not estimate their value. The Department states that it had sought evidence on these impacts but did not receive sufficient information to provide robust estimates. In this context DfT claims it would not have been proportionate to quantify these. This approach appears reasonable.

The total net cost to business of the policy is estimated to be £10.8 million. This would translate to an EANDCB of £2.1 million.

Wider impacts

The IA provides a detailed discussion of the effects of noise pollution on individuals. The Department estimates the number of people affected by aircraft noise at night using the UK Civil Aircraft Noise Contour model ANCON developed by the Civil Aviation Authority and in accordance to the DfT's Transport Appraisal Guidance. These estimates are summarised in the table below:

Number of people affected by night noise

Year	Heathrow*	Gatwick	Stansted
2017-18	89,600	4,600	4,250
2021-22	80,300	4,600	4,350

The IA monetises the effects of sleep disturbance using environmental guidance published by DfT's Transport Analysis Guidance unit, which in turn uses WHO-recommended methodology. Monetary valuation of changes in noise is based on estimation of the number of Disability-Adjusted Life Years[2] (DALY) lost (or gained), assuming a value of £60,000 per DALY. The table below summarises these estimates:

[2] Disability-Adjusted Life Years are related to Quality-Adjusted Life Years (QALY). For more information please see: http://www.who.int/healthinfo/global_burden_disease/metrics_daly/en/

Value of the reduction in sleep disturbance from flights in the NQP (Final Policy Option Vs Do Minimum) (Constant prices)

Airport	2017/18	2018/19	2019/20	2020/21	2021/22
Gatwick	£0	£0	£4,440	£3,290	£5,250
Heathrow	£0	£0	£0	£0	£0
Stansted	£6,340	£41,980	£52,840	£60,280	£62,320

In relation to other health impacts, such as cardiovascular disorders, the IA provides indicative estimates of monetary value of these impacts, but does not include them in the NPV as "*the Department's Transport Analysis Guidance does not contain an approved methodology for estimating the change in the value of the other impact of night noise on health*." (page 29) For this reason the Department argues that the monetised benefit related to reduced noise levels reported in the IA may be an underestimate.

The total impact on public accounts (a reduction in revenues from the Air Passenger Duty and VAT on retail purchases at the airports) has been estimated to be around -£1.3 million and -£0.2 million at Stansted and Gatwick respectively.

The assessment provides a qualitative analysis of impacts on air quality and climate change. These are expected to be minimal.

The Department acknowledges that the impact estimates are subject to considerable uncertainty and clearly sets out the limitations of its analysis.

The estimated equivalent annual net direct cost to business (EANDCB) is £2.1 million.

Quality of submission

Business impacts have been correctly appraised and evidenced, and the IA is fit for purpose for supporting ministerial decision-making.The business NPV and EANDCB are proportionately evidenced.

The IA considers a number of wider impacts. The estimates of the reduction in sleep disturbance and the effect on public accounts seem appropriately and proportionately evidenced. The Department discusses impacts related to air quality and climate change and concludes that they are likely to be negligible – this approach apprears sufficient.

The IA discusses other health impacts related to noise (e.g. risk of a stroke) and provides illustrative values but does not include them in societal net present value estimates. The assessment states that, for this reason, the value of the reduction in night flight noise reported in the assessment might be an underestimate. Therefore, the RPC cannot confirm that the overall NPV estimate is accurate.

The IA provides a clear description of the rationale for intervention and the description of the policy, including a discussion of how consultation affected the final policy choice. The list of cost and benefits identified in the assessment is comprehensive. The IA presents a detailed explanation of the methodology and the assumptions used and clearly sets out the limitations of the analysis. The Department makes it clear when and why its choices in the analysis go against some of the consultation responses – for example, in relation to the minimum level of noise used to estimate the number of people affected by night flights (page 39).

The IA states that the reported benefit of the reduction in night flight noise is likely to be an underestimate and that the real benefit is likely to be greater. The assessment explains methodological considerations leading to this underestimate. However, the IA would have benefited from an indication of the scale of the difference between the estimated benefit and the potential total impact.

The IA uses night flight growth forecasts provided by the three airports to estimate the impacts. Given the sensitivity of the estimates of impact to the assumptions on future growth of night flights, the assessment would have benefited from a more detailed consideration of these forecasts.

For the purpose of estimating the impact of the policy the Department assumed that the current regulatory regime would continue in the counterfactual. This is because the "do nothing" scenario where all restrictions on night flights are lifted has not been considered as a feasible option. The IA explains that it is the Government's responsibility to protect communities from the harmful impacts of aircraft noise and that previous legal judgements confirmed that it "*has an obligation to balance the rights of those persons with the economic interests of those operating and befitting from those flights*". While this is not necessarily relevant to the choice of counterfactual, the Department's approach is consistent with the agreed Better Regulation Framework treatment, pertaining at the time of the IA's submission, for time-limited measures.

The IA indicates that the number of night flights was estimated not only for the "do minimum" and "policy" scenarios but also for the unrestricted "do nothing" scenario. The quality of the assessment would have been improved had these estimates, if available, been presented in more detail.

The Department should have also discussed whether businesses other than airports and airlines are likely to be affected by this policy.

The IA would have benefited from a discussion of safety impacts.

The IA explains that small and micro businesses are not exempt from the current regulatory regime but that few airlines (if any) are expected to be small or micro businesses.

Departmental assessment

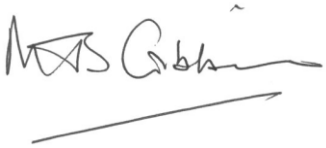
Classification	Qualifying regulatory provision (IN)
Equivalent annual net cost to business (EANCB)	£2.1 million
Business net present value	-£10.8 million
Societal net present value	-£12.1 million

RPC assessment

The RPC confirms that the business NPV and EANDCB estimates provided in this assessment are appropriately evidenced.

The RPC cannot confirm that the overall NPV provided in this assessment is appropriately evidenced.

Classification	Qualifying regulatory provision (IN)
EANDCB[3]	£2.1 million
Business net present value	£-10.8 million
Small and micro business assessment	Sufficient



Michael Gibbons CBE, Chairman

[3] For reporting purposes, the RPC rounds EANCB and BIT score figures to the nearest £100,000.