- that should be undertaken by the airport once a change in the distribution of traffic has been identified.
- 2.36 The government believes that a light-touch approach is still appropriate, with engagement to take place at a minimum of once a year and the involvement of ICCAN to ensure that the process is transparent and achieves a sufficient level of engagement.
- 2.37 The government has also listened to the concerns of some respondents about the name of the category and we have therefore renamed tier 3 as 'Aircraft operational changes to airspace usage' in Section 4 of the Air Navigation Guidance. The guidance provides clarity that tier 3 relates to airspace usage rather than changes to the design of that airspace or the air traffic control procedural changes applicable to that volume of airspace. It also sets out the government's expectations of what airports should do to provide their local communities with sufficient information about air operations in their vicinity.
- 2.38 The government also suggests that the CAA could use their powers of information should they become aware an airport is withholding information which might be useful for communities to understand changes in airspace usage.

Question 1d Please tell us your views on the airspace change compensation proposals.

- 2.39 The government proposed four changes to aviation noise compensation policy, to improve fairness and transparency. The purpose was to incorporate airspace changes into the existing compensation policy so that compensation policy would be the same for all changes which affect noise impacts regardless of whether they are a result of infrastructure change or a tier 1 or 2 airspace change. The four proposed changes to current policy were:
 - Change the policy wording to remove the word 'development' in terms of when financial assistance towards insulation is expected so that compensation is applicable regardless of the type of change (infrastructure or airspace change);
 - Change the policy wording to allow for financial assistance towards insulation in the 63dB LAeq level or above to be applicable regardless of the level of change that causes a property to be in that noise contour level (i.e. remove requirement for a minimum 3dB change);
 - Additional wording to encourage an airspace change promoter to consider compensation for significantly increased overflight as a result of the change, based on appropriate metrics which could be decided upon according to local circumstances and the economics of the change proposal; and
 - Include a requirement of an offer of full insulation to be paid for by the airport for homes within the 69dB LAeq or more contour, where the home owners do not want to move.
- 2.40 Question 1d received 374 comments and the majority of responses were supportive of the four changes proposed. They were broadly seen as fair, thorough and addressed noise impacts. Many also welcomed the cost being absorbed by the aviation industry.
- 2.41 Most supported the proposed removal of the word development and removal of the requirement for a 3dB change and agreed these additional steps would ensure that those impacted by airspace changes were compensated.

- 2.42 Some considered the proposals were inadequate and felt reducing noise should be the priority through quieter or fewer aircraft, rather than to allow noise and then mitigate the impact with compensation. Some were concerned that, due to the new expectation to consider compensation, airspace design could be limited and that rather than aiming to limit noise or carbon emissions, it could instead lead to increased routing over rural areas in order to minimise paying compensation.
- 2.43 Many felt that the current metrics needed to be re-assessed and were concerned that average noise contours do not accurately reflect the situation. They also felt Performance Based Navigation (PBN) changed the dynamics of how noise is experienced with the increase in the number and concentration of aircraft overhead.
- 2.44 Several thought noise changes impacted on property value. Some requested a policy on compliance with compensation that can be monitored and enforced, including a policy on fining those who have not met their obligations to compensate.
- 2.45 The majority supported the proposal for financial assistance toward insulation regardless of whether a change in noise impact is attributable to an infrastructure development or an airspace change, but criticised building insulation or glazing as a means of compensation, both because windows and doors needed to be closed to receive the benefit and it doesn't lessen noise impacts outside.
- 2.46 Some felt that the noise thresholds for financial assistance and full insulation are set too high and that noise contours and consequent compensation eligibility could be expanded.
- 2.47 The proposal to encourage airspace promoters to consider compensation for significantly increased overflights that occur as a result of the airspace change based upon appropriate metrics was supported in principle. However several respondents disagreed with the words 'encourage' and 'consider', and were concerned that airspace change sponsors will exploit the wording to lessen the amount of compensation payments. Others commented that 'overflight' as well as 'significantly increased' are not defined clearly enough and again that this could lead to the proposals not being complied with.

Government Response

- 2.48 We welcome that the majority supported the four changes proposed in the consultation. Therefore we intend to make all of the changes as proposed.
- 2.49 We recognise further points were raised regarding the proposals and will undertake additional consideration of this issue through the Aviation Strategy, by exploring whether a new approach to reducing noise annoyance is needed, for example through better information engagement or by creating a greater sense of 'fairness' and sharing of the benefits of aviation growth, including new forms of compensation and community investment.
- 2.50 We acknowledge the views that noise should be limited in preference to compensation being offered. The Aviation Strategy will also consider the wider question of noise targets which could aim to limit the amount of noise which communities could experience. We also recognise that more guidance would be helpful in circumstances where an airspace sponsor should consider compensation for significantly increased overflight, such as the metrics to be used in assessing increases in overflight and how to ensure airspace sponsors have adequately considered compensation. We will work with the CAA to develop this, taking guidance from ICCAN as appropriate.

options analysis is the best way to ensure these views are appropriately considered.

2.58 We acknowledge the comments about the options appraisal not setting thresholds or targets for noise. This is a strategic issue which raises broader questions on the role of limits or targets and is not something we would expect individual airspace decisions to consider in isolation. We believe that further work should be undertaken and that the Aviation Strategy is best placed to consider how the government can support the sustainable growth of aviation. The recent call for evidence publication asked for views on how such targets could work in practice and we expect to undertake further consultation on this area in 2018.

Question 2b Please provide your views on the proposal for assessing the impacts of noise, including on health and quality of life. Please provide any comments on the proposed metrics and process, including details provided in the Draft Air Navigation Guidance.

- 2.59 It is important for noise assessment to clearly relate to the real-life impacts of noise exposure and to be based on best available evidence. We proposed that our policy should mean that the number of people experiencing adverse effects as a result of aviation noise should be limited and, where possible, reduced. Adverse effects are considered to be those related to health and quality of life. These adverse effects should be assessed using a risk-based approach above the lowest-observed-adverse-effect level (LOAEL), using the DfT's transport appraisal guidance WebTAG.
- 2.60 Question 2b received 560 responses. The vast majority supported the proposal with notable support for the principle of limiting or where possible reducing the number of people significantly affected by aviation noise.
- 2.61 There was overwhelming support to assess the frequency of noise events in addition to existing metrics. Others pointed out that for all metrics the true extent of concentration during certain periods may not be captured (including frequency-based measures averaged out of the course of a 16 hour day or over days when areas are not overflown). 'Limit' and 'significant' were challenged, as they are undefined in the consultation document and do not set parameters that determine if the policy has been met. In particular, as mentioned in responses to 2a, some criticised the fact that the proposals did not include any overall noise targets, either in terms of number of people affected or noise levels.
- 2.62 Using a LOAEL (Lowest Observed Adverse Effect Level) was broadly supported in principle as part of the broader risk-based approach to noise assessment. The specific daytime and night-time values proposed for the LOAEL: 51dB LAeq 16hr and 45dB Lnight also received broad support. Some welcomed that these values are consistent with WHO guidance, while others felt they did not align completely.
- 2.63 The use of WebTAG was supported and many emphasised that health, wellbeing and quality of life needed to be assessed against the impacts of aircraft noise. Some however challenged WebTAG's ability to suitably assess health impacts and suggested it wasn't effective for use in aviation.
- 2.64 Some supported the definition of 'overflight' (CAA definition based on whether an individual will perceive an aircraft as overflying them), but whilst welcoming the principle, some questioned elements of the definition.
- 2.65 Many felt the proposals didn't go far enough to recognise the impacts that noise could have in certain circumstances and that more needed to be done to take

- account of Areas of Outstanding Natural Beauty (AONB), Tranquil Areas, heritage assets, background noise and the difference between rural and urban areas.
- 2.66 Some felt they were being impacted by aircraft noise, but noted that they did not fall within the LOAEL or that using an average to measure noise does not capture noise increases where an airspace change has occurred. Others felt average noise levels didn't accurately reflect the frequency of noise events, respite periods, or their full significance in terms of health and quality of life impacts and called for more research.
- 2.67 There was also requests for WebTAG to be explained further to improve understanding of how it is used, whilst some suggested that WebTAG is further developed and consulted on, and that the new metrics should be consulted on before being implemented. It was also suggested ICCAN could help to research metrics and establish best practice.

Government Response

- 2.68 We welcome the support for the proposals and we will proceed with these proposals as we believe they are the correct ones for ensuring that evidence-based and transparent decisions are made regarding aircraft noise.
- 2.69 The government's overall policy on aviation noise is to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise as part of a policy of sharing benefits of noise reduction with industry in support of sustainable development. Consistent with the Noise Policy Statement for England, our objectives in implementing this policy are to:
 - limit and, where possible, reduce the number of people in the UK significantly affected by the adverse impacts from aircraft noise;
 - ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions; and
 - minimise local air quality emissions and in particular ensure that the UK complies with its international obligations on air quality⁴.
- 2.70 The government acknowledges the evidence from recent research⁵ which shows that sensitivity to aircraft noise has increased, with the same percentage of people reporting to be highly annoyed at a level of 54 dB LAeq 16hr as occurred at 57 dB LAeq 16 hr in the past. The research also showed that some adverse effects of annoyance can be seen to occur down to 51dB LAeq.
- 2.71 Taking account of this and other evidence on the link between exposure to noise from all sources and chronic health outcomes, we will adopt the risk based approach proposed in our consultation so that airspace decisions are made in line with the latest evidence and consistent with current guidance from the World Health Organisation.
- 2.72 So that the potential adverse effects of an airspace change can be properly assessed, for the purpose of informing decisions on airspace design and use, we will set a LOAEL at 51 dB LAeq 16 hr for daytime, and based on feedback and further discussion with CAA we are making one minor change to the LOAEL night metric to be 45dB LAeq 8hr rather than Lnight to be consistent with the daytime metric. These metrics will ensure that the total adverse effects on people can be assessed and airspace options compared. They will also ensure airspace

⁵ Survey of Noise Attitudes 2014 http://www.caa.co.uk/cap1506

⁴ Air Navigation Guidance 2017, DfT, Section 1.2.