

## INITIAL TMBC NOTES RE: NOISE – 14 NOVEMBER 2014

In order to evaluate the potential impacts of flying noise on residents of Tonbridge and Malling the Council has instructed consultants to review the noise documentation submitted with the applications. Set out below are a summation of the initial thoughts of the Council's consultant and it will be noted that a number of matters have emerged that require further clarification.

Our consultant expresses the view that is unclear how Environ have obtained the contours in their report.

He has generated some noise contours, by assuming a 5 degree approach glide slope, but these do not mirror the shape of contours in the Environ report. It is also not entirely clear whether the new helipad position has been taken into account in generating the contours. It is assumed that the helicopter movements, post development, will approach and depart along routes parallel with the new surfaced runway. They may not all do that but what helicopter routes have been assumed? (For instance given the aspirations for substantial development on the north west sector of the airport in due course, is it to be assumed that helicopter flights will not take-off in that direction?)

With regard to the noise assessment, there are firstly a number of policy and methodology matters in the assessment upon which we would wish for further clarification.

### POLICY

Para 3.4 does not fully reflect what is said in the Aviation Policy Framework (APF), which fully replaced the "Future of Air Transport" white paper, and mention of the latter is not relevant.

The APF says at paragraph 17 (and again at 3.12) that "*Our overall objective on noise is to limit and where possible reduce the number of people in the UK significantly affected by aircraft noise.*"

At 3.17 it says "*We will continue to treat the 57dB LAeq 16 hour contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance. However, this does not mean that all people within this contour will experience significant adverse effects from aircraft noise. Nor does it*

*mean that no-one outside of this contour will consider themselves annoyed by aircraft noise."*

*and at 3.19 "Average noise exposure contours are a well established measure of annoyance and are important to show historic trends in total noise around airports. However, the Government recognises that people do not experience noise in an averaged manner and that the value of the LAeq indicator does not necessarily reflect all aspects of the perception of aircraft noise. For this reason we recommend that average noise contours should not be the only measure used when airports seek to explain how locations under flight paths are affected by aircraft noise. Instead the Government encourages airport operators to use alternative measures which better reflect how aircraft noise is experienced in different localities, [Footnote 96]"*

*Footnote 96 says "Examples include frequency and pattern of movements and highest noise levels which can be expected."*

*At 3.45 the APF says "Noise from helicopters is perceived as a problem in certain areas, such as routes used intensively by helicopters."*

The APF makes frequent reference to the work of the Airports Commission, whose approach to noise was originally set out in their interim report, and is summarized in the three reports issued today, namely

*"In this document, we present noise impacts in the following ways:*

- day noise (LAeq16h 0700-2300) and night noise (LAeq8h 2300-0700), looking particularly at the 57 decibel level (which in the Government's Aviation Policy Framework marks the approximate onset of significant community annoyance), and the lower 54 decibel level;*
- the European 24 hour Lden measure, which puts more weight on noise that occurs in the evening (1900-2300) or the night (2300-0700) than the daytime (0700-1900);*
- N contours, which capture how many times in a day or night a population will be exposed to a very noisy aircraft flyover (with a 70 decibel threshold for the day, and a 60 decibel threshold for the night)."*

The last bullet point is important, because in the Inspector's report and Secretary of State's Decision on the Farnborough appeal dated 20 February 2011 the Inspector said at 485 *"For my part I am clear that, based on the analysis above, the proposed increase in movements would lead to more frequent instances of speech interruption*

*(compared to both today's position and to that of the fallback) and would result in greater annoyance to an appreciable number of residents. Irrespective of whether or not a 2.2db(A) increase is said to be discernible, residents would be very much aware of the noise events consequent on the increased numbers of movements (on average an additional 71 BATMs per weekday)."*

The Secretary of State agreed with the Inspector's conclusion that *"while the evidence presented on the basis of the conventional means of assessment, supplemented by subjective assessment, indicates that the noise effects of the proposal would be moderate, the effects would nevertheless amount to demonstrable harm"*

More generally, all noise planning matters are now subject to the Noise Policy Statement for England (NPSE), and the weight to be attached to the three aims of the NPSE was highlighted by the recent Secretary of State's decision on the Thames Tideway Tunnel.

In short, the three aims are:

*"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:*

- avoid significant adverse impacts on health and quality of life;*
- mitigate and minimise adverse impacts on health and quality of life; and*
- where possible, contribute to the improvement of health and quality of life."*

The Aviation Policy Framework refers to the NPSE in 3.12 and 3.13

*"3.12 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.*

*3.13 This is consistent with the Government's Noise Policy, as set out in the Noise Policy Statement for England (NPSE)<sup>93</sup> which aims to avoid significant adverse impacts on health and quality of life."*

The NPSE has an explanatory note which introduces the concepts of Significant Observed Adverse Effect Level (SOAEL) and Lowest Observed Adverse Effect Level (LOAEL).

The noise assessment should therefore include statements as to what noise impacts are SOAEL and what are LOAEL, how SOAEL will be avoided and what means will be used to mitigate and minimise LOAELs.

Planning Policy on Noise, PPG24 was withdrawn by the NPPF and should no longer

be used as a reference point.

The web-based Planning Practice Guidance issued on 6 March 2014 <http://planningguidance.planningportal.gov.uk/blog/guidance/noise/> fleshes out the NPSE and adds further guidance on the way SOAELs and LOAELs should be assessed.

## THE INTERPRETATION AND APPLICATION OF POLICY IN THE ENVIRON REPORT

Section 3 "Policy Context" begins by referring to the statutory position regarding noise mapping, and the use of Lden and Lday in the preparation of strategic noise maps. Lden and Lday while relevant to strategic noise maps, do not play a major role in current policy regarding the *assessment* of noise in development proposals.

This is followed, at paragraph 3.3, by a paragraph on the ATWP *which no longer has any weight, as it has been replaced by the Aviation Policy Framework*.

Under the heading of "Aviation Policy Framework" an inaccurate statement is made that the government's overall policy aim is "achieved by conducting noise contours down to a level of 57 dB LAeq 16h", with a following reference to the *now withdrawn PPG 24*.

The Planning Statement at 9.3.12 says that the Air Transport White Paper (ATWP) and Aviation Policy Framework (APF) consider 63 dB LAeq 16h to be the upper threshold of low community annoyance. The meaning of this is obscure, as there cannot be more than one threshold, and on the applicant's approach (as set out at Table 3 of the Noise Report) this is the threshold of "moderate" community annoyance. The APF actually treats 63 dB LAeq 16h as a noise insulation threshold, which suggests (based on the Decision of the Secretaries of State in the Thames Tideway Tunnel DCO process) that 63 dB LAeq 16h is the Significant Observed Adverse Effect Level. They also use the term "*significant*" in APF 3.17 as quoted above.

There is no discussion of SOAELs and LOAELs in the report. There is a suggestion that many local authorities are still using PPG24's NEC system (which in any event did not apply to the assessment of airport developments). While historical reference to PPG24 may play a part in deciding what are SOAELs and LOALs, they would have to be directly addressed in any planning appeal. Case-law indicates clearly that it is not appropriate to use now withdrawn PPG (or PPS) based standards where these are not carried forward into NPPF/PPG.

## THE NOISE EFFECTS OF THE PROPOSAL

The noise effects have been assessed in terms of airborne aircraft noise and ground noise. The contours of airborne aircraft noise do not appear to be correct, and therefore the numerical assessment cannot be relied on until this issue is resolved.

### Airborne Aircraft Noise

The effects will result from:

- 1) the concentration of all fixed wing flights on runway 02/20 and the closure of runway 16/34
- 2) the relocation of the helipad
- 3) any change in numbers of movements
- 4) any change in time of day for aircraft movements

According to paragraph 2.7 of the planning statement, approximately 30% of aircraft currently use runway 16/34, which means a 43% increase in the number of overflights for residents below the flight paths for runway 02/20.

This is potentially significant for two reasons. Firstly the additional movements cause a 1.5 dB increase in the noise contours for the relevant areas, but more importantly, there is a loss of respite from aircraft noise, which currently occurs for 30% of the time.

This only applies to fixed wing movements, and an important feature of Rochester Airport is the substantial number of helicopter movements from the helipads whose locations will be re-sited by the proposals. Only one helipad appears on the site plan, at the southern edge of the airfield, and this will cause some alteration of helicopter routes close to the airfield. There is insufficient information provided to be able to quantify this.

It must be assumed for the purposes of a robust assessment that at some stage the proposed 40,000 movement limit will be used, and compared with 2013 movement numbers that is a 70% increase. An increase of that magnitude is possible under the existing regime, and it is not clearly identified as to whether the provision of a paved runway will itself bring about an increase in the use of the airfield. A 70% increase in air movements gives an increase of 2.3 dB in LAeq contours, all other things remaining unchanged.

Clearly to the extent that the proposed time limits will prevent movements which currently take place outside those times, there will be a corresponding absence of

noise outside the operational limits.

### Ground Noise

The report finds that there will be no change in ground noise levels as a result of the proposals, and there is no obvious reason to challenge that finding.

### Circuit Flying

Burham is about 2.4km from the threshold of runway 02 but aircraft flying circuits would turn on to the crosswind leg at approximately this distance and although the village is beyond the end of the noise contours (even if these are extended down to lower values than 57 dB LAeq 16h) a 30% increase in numbers will not go unnoticed (See Farnborough appeal cited above.).

What is the likelihood of larger and/or noisier aircraft being able to land/take off as a result of the proposed change to the runway surface? It would appear that runway dimensions (principally length) rather than runway surface determines the size of aircraft that can operate can the applicant commit to a specific set of aircraft types that will habitually use the runway

### Approach Path

It is understood that there is a requirement that aircraft not using the PAPI on runway 02/20 approach on a 5 degree slope, which is higher than the 3 degrees used at large airports. Does this effectively mean that whereas aircraft using runway 16/34 have to use a steep approach, which by virtue of the resulting greater height therefore appear quieter from the ground, all aircraft on 02/20 using the PAPI will not have to make a steep approach? Can it be confirmed what approach profile has been assumed in the noise contours.

It appears, but can it be confirmed, that the increase in the overall noise impact of the airport, will be greater than it seems if the 30% of aircraft currently using 16/34 will use a lower approach glideslope when using 02/20.