Dated: 8 MARCH 2019

FOREWORD

In an effort to aid the ExA we are submitting comments with evidence in the form of a row under each of the answers provided by the Applicant on a section by section basis

- Our comments have been highlighted in yellow for ease of identification
- We respectfully request the questions in red below the comments are considered by the ExA and/or asked of Applicant as appropriate
- As a general comment, we would like to take this opportunity to point out that the Applicant does not appear to have provided any independent evidence to support any of the statements it has made throughout its responses in the Noise and Vibrations section, unless such underlying third party documents have been specifically referred to by the ExA in its original questions, (e.g. Aviation National Policy Statements, ("NPS"). Any and all footnotes in this document are therefore provided by Five10Twelve Ltd as independent evidence to support our comments
- Comment or question (or lack of) does not mean agreement with or support for Applicant. FIVE10TWELVE LTD STATEMENT REGARDING CONFLICT OF INTEREST AND IMPARTIALITY

For the avoidance of any doubt and in the interests of full transparency, we hereby confirm that neither Five10Twelve Ltd or its subsidiary, Love Ramsgate Ltd, or any of our Directors have any interests, either financial or otherwise, in the Manston site or any other rival development beyond those of a local business and local residents with strong concerns regarding the devastating impacts of the proposed development on the local area, economy, environment and population.

Neither Five10Twelve Ltd, or Love Ramsgate Ltd, or any of our directors have accepted any payments or any other form of compensation or inducements for presenting this or any of our other submissions or representations to the ExA. Any

offers or suggestions of such from any party will be refused and immediately reported to the ExA.

GENERAL OVERARCHING COMMENT

- A. There is **no author given for the Noise Mitigation Plan (APP-009)** or **(REP3-196)** and it has not been evidenced as to who authored it and their area of expertise. Nor is there any author listed for the Responses to the Written Questions.
- B. The Noise Mitigation Plan seems to have been drafted by Applicant with scant regard for the statutory and regulatory regime.
- C. Paragraph 5.47 of the Airports National Policy Statement¹ states:

 "Major airports are, however, under a legal obligation⁶ develop strategic noise maps and produce Noise Action Plans based on those maps, on a ^Dive yearly basis. They are also required to review and, if necessary, revise action plans when a major development occurs affecting the existing noise situation. In addition, the Government already expects the noise-designated airports (Heathrow, Gatwick and Stansted) to produce noise exposure maps on an annual basis".
- D. Under the E.U Environmental Noise Directive 2002/49 which is implemented in England by the Environmental Noise (England) regulations 2006 (S.I. 2006/2238 as amended). This Directive is commonly referred to as the Environmental Noise Directive or END. The requirements of the END are transposed by the UK Government in the Environmental Noise (England) Regulations 2006 as amended³ ("the Regulations") **the Applicant will need to do a Noise Action Plan. This is a legal obligation.**
- E. All other airports that the proposed Airport has compared East Midlands, Southend, Bournemouth, Southhampton etc have a Noise Action Plan.
- F. Paragraph 5.52 of the Airports National Policy Statement⁴ states:

 "Pursuant to the terms of the Environmental Impact Assessment Regulations, the applicant should undertake a noise assessment for any period of change in air traf^Dic movements prior to opening, for the time of opening, and at the

¹ Airport National Policy Statement June 2018

² The E.U Environmental Noise Directive 2002/49 which is implemented in England by the Environmental Noise (England) regulations 2006 (S.I. 2006/2238 as amended). **NS-001**

³ Ibid

⁴ Airport National Policy Statement June 2018

time the airport is forecast to reach full capacity, and (if applicable, being different to either of the other assessment periods) at a point when the airport's noise impact is forecast to be highest. This should form part of the environmental statement. The noise assessment should include the following: • A description of the noise sources; • An assessment of the likely signi^Dicant effect of predicted changes in the noise environment on any noise sensitive premises (including schools and hospitals) and noise sensitive areas (including National Parks and Areas of Outstanding Natural Beauty); • The characteristics of the existing noise environment, including noise from aircraft, using noise exposure maps, and from surface transport and ground operations associated with the project, the latter during both the construction and operational phases of the project; • A prediction on how the noise environment will change with the proposed project; and • Measures to be employed in mitigating the effects of noise".

- G. Paragraph 5.60 of the Airports National Policy Statement⁵ states:

 "The applicant **should put forward plans for a noise envelope**. Such an envelope should be tailored to **local priorities and include clear noise performance targets**. As such, the design of the envelope should be defined in consultation with local communities and relevant stakeholders, and take account of any independent guidance such as from the Independent Commission on Civil Aviation Noise".
- H. The benefits of future technological improvements should be shared between the applicant and its local communities, hence helping to achieve a balance between growth and **noise reduction**. Suitable **review periods** should be set in consultation with the parties mentioned above to ensure the noise envelope's framework remains relevant.
- I. Paragraph 5.62 of the Airports National Policy Statement⁶ states: The Government also expects a **ban on scheduled night flights for a period of six and a half hours**, between the hours of 11pm and 7am, to be implemented⁷.
- J. The rules around its operation, including the **exact timings of such a ban, should be defined in consultation with local communities and relevant stakeholders, in line with EU Regulation 598/2014**. In addition, outside the hours of a ban, the Government expects the applic applicant to make **particular efforts to incentivise the use of the quietest aircraft at night**.
- K. Paragraph 5.67 of the Airports National Policy Statement states8:

⁵ Airport national Policy Statement June 2018

⁶ Airport national Policy Statement June 2018

⁷ 11pm to 7am is the standard night period used in noise measurement, and is used in World Health Organisation guidelines and the Environmental Noise Directive

⁸ Airport national Policy Statement June 2018

"The proposed development must be undertaken in accordance with statutory obligations for noise. Due regard must have been given to national policy on aviation noise, and the relevant sections of the Noise Policy Statement for England, the National Planning Policy Framework, and the Government's associated planning guidance on noise. However, the Airports NPS must be used as the primary policy on noise when considering the Heathrow Northwest Runway scheme, and has primacy over other wider noise policy sources".

- L. Paragraph 5.68 of the Airports National Policy Statement⁹ states:

 "Development consent should not be granted unless the Secretary of State is satis^hed that the proposals will meet the following aims for the effective management and control of noise, within the context of Government policy on sustainable development: Avoid signi^hicant adverse impacts on health and quality of life from noise; Mitigate and minimise adverse impacts on health and quality of life from noise; and Where possible, contribute to improvements to health and quality of life".
- M. We note Part 2 of the Noise Mitigation Plan **REP3-196** there is a middle column with very small writing which on enlarging we note is called "Remarks'.
- N. Within this column there are **assumptions** about how some of the aircraft **could be modified** for **noise reduction** such as "acoustic treatment", "Quiet Skies Stage 7 HushKit", "VALSAN Hushkit", "FEDEX Hushkit", "NORDAM LGW-H Hushkit", "Treated forward Acoustic panel", "With Noise Reduction Inlet", "With N5 Modi^Pier", "Flap Mod 69^{0 1}6" etc it goes on and on over 18 pages.
- O. We note from previous noise data that historical data submitted previously with **REP2-013 evidence historic aviation noise at much higher levels.** We note that many other Interested Persons have raised concerns over noise modelling, noise methodology, noise data collection from Statutory Bodies, to Campaign groups to Individuals.
- P. We note that OBS 12 Ramsgate was informed by local characterisation and short-term measurement.
- Q. We note there have been a number of reported inaccuracies re local characterisation for example our beach being beside a road (when it is clearly at the bottom of a cliff with a large body of unoccupied land separating it even from the bottom of the cliff).
- R. We note that it was recorded at OBS 12 Ramsgate that the noise data collector could hear the sound of a military jet on 7 March 2017. This is clearly an unusual occurrence and would warrant further investigation.

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⁹ Airport national Policy Statement June 2018

S. We note that on 7 March 2017 there was an indeed an atypical event over England and Ramsgate. A private Saab 340 aircraft inbound from Bucharest to Birmingham and carrying three crew encountered communication difficulties during a flight on 7 March 2017.

"In accordance with normal operating procedures the aircraft was intercepted by military jets on arrival into UK airspace and was escorted up to its scheduled arrival into Birmingham¹⁰"

- This event would account for the atypical sound event.
- U. We note the housing stock of Ramsgate, number of schools under the flight swathes.
- V. We note Applicant has used aspirational flights with modifications.
- W. We note Applicant has used aspirational preferential runway use.
- X. We note Applicant at OP1.1 has stated that "**current forecast** Manston ATM, an average of less than 3 movements (a landing and a take-off) per hour will take place"
- Y. We Applicant has stated at **OP 1.11** the physical capability of Work No. 9, the 19 cargo stands, is as mentioned in the application, calculated as **83,220 ATMs a year**. The physical capability of Work No. 10, the three recycling stands is calculated as **36 ATMs a year** (each stand receiving one aircraft which takes a month to dismantle). The physical capability of Work No. 11, the four passenger stands, is calculated as **43,800 ATMs a year**. This is based on each stand managing **15 incoming and outgoing flights between 0700 and 2300** with an hour's dwell time and 10 minutes between a flight leaving and the next one arriving.

WE RESPECTFULLY REQUEST -

- 1. Applicant should produce an Environment Statement with true noise data both current and historic.
- 2. Applicant should produce an Environment Statement with worst case realistic forecasted noise with no optimism

¹⁰BBC News, 7 March 2017, RAF jets escort plane to Birmingham airport

bias. IE with historic runway usage, with planes without modification, with accurate planes (for example one of the planes listed (Antonov An-124¹¹) cannot be used at Manston because the runway is too short. It requires a runway of 9842'6"whereas Manston is 9,016').

- 3. Applicant has made an application for a DCO CPO to acquire land to build infrastructure to serve (what it is seeking to prove) a national need. It either does need the infrastructure (WORKS 9-11) to facilitate meeting that need (if it exists) because it is that large or it does not need the infrastructure (WORKS 9-11) to facilitate serving that need (if it exists) because it is not that large. That need must be quantifiable in order to assess the worst case realistic environmental impact.
- 4. Applicant should produce an Environmental Statement with the true number of ATMs.
- 5. If a Statement of Need has been submitted to the CAA we respectfully request the ExA to ask the Applicant to produce said Statement of Need.

Ξ.

¹¹ Antonov-An-124 Specifics

Ref No.	Respondent	Question
Ns.1 Noise and Vibration		

in paragraphs 2.4 and 2.5 of the Noise Mitigation Plan [APP-009] concerning noise insulation funding. Specifically, this relates to: "residential properties with habitable rooms within the 63dB LAeq (16 hour) day time contour' and 'residential properties with bedrooms falling within the 55dB LAeq (8 hour) contour' and the provision of 'reasonable levels of noise insulation and ventilation for schools and community buildings within the 60dB LAeq (16 hour) daytime contour" DDC has noted that these levels are greater than those given with respect to acoustic insulation under the Heathrow Expansion consultation in January 2018 which refers to 60dB LAeq (16 hour) contours for an inner zone and 57dB LAeq (16 hour) contours for an outer zone. In addition, the CAA's recent findings on Aircraft Noise and Annoyance (February 2018) makes reference to UK policy in	Ref No.	Respondent	Question
DDC recommends (as does KCC in [RR- 0974]) that the daytime noise contour of 60dB LAeq (16 hour) used for schools and community buildings is also used as the daytime noise contour qualification for noise insulation. What is the Applicant's view on the DDC recommendation?	Ns.1.1	The Applicant	Dover District Council (DDC) has noted that properties in the Dover District fall outside of the noise contours as referred to in paragraphs 2.4 and 2.5 of the Noise Mitigation Plan [APP-009] concerning noise insulation funding. Specifically, this relates to: "residential properties with habitable rooms within the 63dB LAeq (16 hour) day time contour' and 'residential properties with bedrooms falling within the 55dB LAeq (8 hour) contour' and the provision of 'reasonable levels of noise insulation and ventilation for schools and community buildings within the 60dB LAeq (16 hour) daytime contour" DDC has noted that these levels are greater than those given with respect to acoustic insulation under the Heathrow Expansion consultation in January 2018 which refers to 60dB LAeq (16 hour) contours for an inner zone and 57dB LAeq (16 hour) contours for an outer zone. In addition, the CAA's recent findings on Aircraft Noise and Annoyance (February 2018) makes reference to UK policy in relation to an 'annoyance threshold' and highlights 57dB LAeq (16 hour) as marking the approximate onset of significant community annoyance. DDC recommends (as does KCC in [RR- 0974]) that the daytime noise contour of 60dB LAeq (16 hour) used for schools and community buildings is also used as the daytime noise contour qualification for noise insulation.

	Applicant's Response:
	Noise insulation is included in the Noise Mitigation Plan [APP-009] to avoid significant adverse effects of noise as required
	by the first bullet point of paragraph 5.68 of the Airports National Policy Statement and in accordance with the first aim of
	government noise policy. For the purposes of this proposal, the Significant Adverse Effect Level (SOAEL) has been set at

Ref No.	Respondent	Question
		63 dB LAeq,16h. Government policy states that above this threshold, significant observed adverse effects on health and quality of life can begin to be observed in an average person.
		DDC makes a comparison with Heathrow's proposed noise insulation scheme. We do not consider it appropriate to compare Manston Airport with Heathrow in terms of likely noise impacts. A resident living within Heathrow's noise insulation "inner zone" may have approximately 600 aircraft per day fly overhead (approximately one every 90 seconds), whilst a resident located within the Manston 60 dB LAeq,16h noise contour may have up to 36 aircraft fly overhead per day in the peak operating year (approximately 4 – 5 aircraft per hour).
		DDC also make reference to the CAA's recent findings on Aircraft Noise and Annoyance (CAP 1588 February 2018). The statement quoted, provided in its full context below, is with reference to the Government's 2003 White Paper (The Future of Air transport Dec 2003) and subsequent Aviation Policy Framework 2013:
		"The 2003 Air Transport White Paper subsequently defined 57dB LAeq,16h as marking the approximate onset of significant community annoyance, and this was reaffirmed in the Government's 2013 Aviation Policy Framework."
		At paragraph 5.25 in its consultation document of February 2017, entitled: UK Airspace Policy: A Framework for Balanced Decisions on the Use and Design of Airspace, the Government noted that there are several issues with the statement: "daytime aviation noise level of 57 dB LAeq 16hr as marking the approximate onset of significant community annoyance". Consequently, this statement no longer appears in Government policy documents.

	As you will be aware PHE identified that a large number of sensitive and vulnerable people live under the
	flight swathe.
	Applicant should evidence why it does not share PHE concerns.

Ns.1.2	The Applicant	KCC [RR- 0974]
		Paragraph 12.5.8 of the Environmental Statement [APP-034] describes the measures in the Noise Mitigation Plan [APP-
		009] and one of these is a voluntary quota count system.
		The Annual Quota Count is 3,028 (this is for noise emissions, not number of movements, between 23:00 and 07:00). The proposed quota equates to approximately 8 quota count points per night and given that paragraph 12.7.40 of the ES [APP-
	1	proposed quota equates to approximately o quota count points per hight and given that paragraph 12.7.40 of the ES [AFF-

Ref No.	Respondent	Question
		034] states the forecast is to handle 7 aircraft during a typically busy night period, this is possible (given a QC/1 aircraft would use one of those points).
		The Noise Mitigation Plan currently has no dates on it.
		i. How long does the Applicant propose the quota count system will apply?
		ii. When would it be subject to review and by whom?
		Applicant's Response:
		i. The question's description of the Night Noise Quota component of the Noise Mitigation Plan [APP-009] described in the Environmental Statement [APP-034] is correct. The Applicant proposes that the quota count system will apply in perpetuity, or until agreed to no longer be required by the Local Planning Authority or other relevant authority.
		ii. If it were decided to amend the quota count, then this would be effected via an application to the Secretary of State to amend the DCO.
		This is too onerous and unreasonable condition. It is also against the regulatory and statutory law in relation to noise. 7 aircraft a night is not a worse case realistic quantification of Quota Count. If every aircraft had a quota count of 1 on take-off (landing 0.5) we could end up with over 6000 ATMs a year which would mean 17 flights a night.
		It is not just the flights it is the associated road traffic (fuel, tankers, passengers and workers) as well as the loading and unloading of freight.
		And an increase in traffic plus overnight parking.
		Currently Applicant forecasts that noise will increase over time not only this against the Aviation National

		Policy and all related policies on Sustainability.
		This cannot be right that cumulative effects and noise will rise exponentially.
Ns.1.3	The Applicant	KCC [RR- 0974]
		At Year 20 in the daytime, 115 properties are forecast to be within the Significant Observed Adverse Effect Level (SOAEL) and 8 in the Unacceptable Adverse Effect Level (UAEL - meaning above 69 dB LAeq 16hr) [APP-034].
		Insulation for those in the SOAEL will reduce the noise exposure and remove them from the 'significant' category, and the relocation scheme will apply to those in the UAEL.
		i. Given the number of residents in the SOAEL (63 dB LAeq 16hr) that may still experience adverse effects (some more so than others, and retaining significant effects in their garden and with open windows – see Basner et al

Ref No.	Respondent	Question
		2006 ⁴), would the Applicant be willing to extend the relocation scheme to those 115 dwellings on a discretionary basis if they are not within the formal scheme?
		ii. Can the Applicant make a copy of Basner et al 2006 available to the examination?
		Applicant's Response:
		i. The Applicant does not believe there is evidence to warrant committing to a relocation scheme for the additional 115 properties until actual operations commence and the effects of the Proposed Development can be more accurately measured. While the Applicant has provided a 20-year environmental assessment, the Applicant believes that it may never reach the effects outlined in year 20. This is because aircraft are anticipated to continually become quieter. The Applicant will keep this issue under constant review.
		ii. Yes, please see Appendix Ns.1.3 in TR020002/D3/FWQ/Appendices
		This is contra to industry knowledge about freight aeroplanes - they are older and noisier.
		There is currently no aviation noise for 5 years.
		There is historic nose data that evidences noise levels. As you will be aware they are considerably higher than
		Applicant noise data which has been shown to be inaccurate.
		We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.

Ns.1.4	The Applicant	PHE [RR-1608]
		It appears the Applicant has determined significant and unacceptable adverse effect levels (Significant Observed Adverse Effect Level (SOAELs) and Unacceptable Adverse Effect Level(UAELs)) for daytime noise exposure based on recommendations for airport actions in the Aviation Policy Framework (APF) (2013) (Environmental Statement paragraphs 12.6.64 and 12.6.65 [APP-034]).
		The night time SOAEL appears to be chosen as the level where adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed and there is evidence that the risk of cardiovascular disease increases, according to the WHO Night Noise Guidelines ⁵ .

⁴ Section 12.6 [APP-034]

⁵ WHO Night Noise Guidelines for Europe, 2009

Ref No.	Respondent	Question
		However, paragraph 15.7.8 of the ES [APP-034] states:
		"Given the multidisciplinary nature of health and the strength of evidence for each health pathway, the individual assessment protocols (i.e. for changes in air or noise exposure), have been applied to inform a judgement on the magnitude and distribution of change, based upon:
		the magnitude of potential impacts;
		the sensitivity of the communities affected; and
		identified local health needs and objectives."
		We could not find reference as to how the 2nd and 3rd bullet points were considered in the judgement of significance of noise effects.
		Point to where in the ES [APP-033, APP-034 and APP-044] where bullet items 2 and 3 were considered.
		Applicant's Response:
		Bullet items 2 and 3 have been considered in Chapter 15 of the ES [APP-034] and Appendix 15.1 [APP-058].
		Section 3 of Appendix 15.1 discusses the sensitivity of communities affected, based on analysis of the Community Profile data in Appendix 15.2. Paragraphs 15.4.2 and 15.7.6 in Chapter 15 then confirm that the sensitivity has been considered as 'high' for the assessment.
		Paragraphs 3.20–3.22 and Table 3.1 in Appendix 15.1 set out the health needs and objectives identified by the Kent Health and Wellbeing Board's Joint Strategic Needs Assessment, by the Kent Director of Public Health during consultation, and by policy in the NPPF. These local health priorities, needs and objectives are then summarised in Table 15.2 of Chapter 15.

Ref No.	Respondent	Question
		Paragraphs 15.7.10 and 15.7.11 in Chapter 15 set out how these factors have been used to inform the judgement of effect significance, tailored to local circumstance, priority and need.
		Paragraph 15.8.39 in Chapter 15 is one example of this applied in practice to the significance of health effect from employment generation. The paragraph refers to the magnitude of employment levels with health outcomes, the sensitivity of affected communities, the embedded enhancement measures and the relevant local health objectives in supporting the judgement of an overall 'moderate beneficial' significance of effect.
		Paragraph 15.8.27 in Chapter 15 is a further example, where the information about baseline health (community sensitivity) has been applied to a precautionary judgement of a 'minor adverse' significance of effect. In the assessment of noise impacts on health and wellbeing, paragraph 15.8.15 refers to relevant health needs/objectives and paragraph 15.8.11 considers particular sensitive receptors (healthcare facilities) within the context of the overall 'high' sensitivity of the community specified in paragraph 15.7.6. These factors, together with the magnitude of impacts (predicted health outcomes) reported in that section, have informed the significance of effect predicted.
		As evidenced within REP3-056
		In fact, Applicant did not contact Thanet Clinical Commissioning Group (CCG) and they confirmed to me by Freedom of Information Request that:
		"as far as [we] are aware, no NHS Thanet CCG's Governing Body member [defined as individuals that make up
		the CCG's governing body] has had any correspondence with RiverOak Strategic Partners [Applicant] or any of their associated companies and/or professional advisors and/or any third party."
		Andrew ScottClark, Director of Public Health Kent County Council has confirmed that:
		"Thanet is diverse with a range of health needs with some of the most deprived communities in Kent being
		resident in the district of ThanetA number of these will directly affected by [Applicant's] proposals particularly Newington and Central Harbour/Eastcliffe areas of Ramsgate. We know that these populations will be more
		adversely affected by issues such as noise and air pollution than the general population".
		We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.

Ns.1.5	The Applicant	PHE [RR-1608]
		In its RR, PHE states that the Applicant appears to assume that sound insulation will address most of the adverse effects for those properties eligible for it [APP-009].
		Provide the evidence which demonstrates that noise insulation is effective at mitigating the adverse psychological and physiological health outcomes associated with aviation noise.
		Applicant's Response:
		It should be noted that APP-009 is the Noise Mitigation Plan which in itself does not make a judgment as to the effectiveness of mitigation measures. The assessment relating to psychological and physiological health outcomes and the
		effectiveness of noise insulation can be found in Chapter 15 of the ES [APP-034]. In this regard the Applicant considers that adverse

Ref No.	Respondent	Question
		health outcomes associated with noise exposure in affected buildings would be reduced in proportion to the effectiveness
		of sound insulation at further attenuating noise and reducing indoor noise levels. This view is based on the causal pathway
		illustrated in Figure 1.2 of Appendix 15.3 [APP-058], which relates health outcomes to underlying factors including
		annoyance, sleep disturbance and disruption to activities that are affected by noise levels inside buildings while people are present in them. The evidence supporting this is discussed in Appendix 15.3 and the references thereto. Paragraphs 7.10
		in the HIA (Appendix 15.1) [APP-058] and 15.8.17 in Chapter 15 [APP-034] set out this position for the assessment of
		impacts. However, paragraph 15.8.18 in Chapter 15 is clear that the Applicant does not suggest that the mitigation
		proposed will necessarily fully remove the impact, and the predicted residual health and wellbeing effect is conservatively
		assessed to be 'moderate adverse'.
		The broad expectation that the reduction in adverse health outcomes would be proportional to the reduction in noise
		achieved by sound insulation may be modified by evidence of thresholds or non-linearity of exposure-response evidence in
		some cases, but this cannot be considered in detail prior to establishing existing outdoor to indoor attenuation at properties
		eligible for sound insulation and how much additional attenuation the sound insulation would achieve. Given that it is not possible, at this stage, to fully ascertain how effective the noise mitigation will be at a particular receptor, the assessment of
		health impacts has taken a conservative approach of assuming that it will not be in place which results in findings of
		moderate adverse effects. In reality, the provision of noise insulation is likely to reduce the health impacts below that level.
		Only limited direct evidence is available of the effect of noise insulation on reducing adverse health outcomes associated
		with aviation noise, as this has been little studied. The review, included at Appendix Ns.1.5 in
		TR020002/D3/FWQ/Appendices, of studies of transport noise 'interventions' undertaken to inform the recently published
		WHO Environmental Noise Guidelines for the European Region identified only one study of the effect of noise insulation for
		aviation noise on health outcomes (annoyance and sleep disturbance) and two studies of insulation for road noise. These studies did find a decrease in annoyance and sleep disturbance associated with installation of sound insulation. Overall,
		the interventions review found that the majority of studies of all types of intervention (including reductions in the noise at
		source, noise barriers, noise insulation or closing/moving transport infrastructure) showed that interventions were
		associated with
		changes in health outcomes, with the outcomes studied being mainly annoyance and sleep disturbance. However, the limited

Ref No.	Respondent	Question
		number of studies and variability of methods meant that deriving a relationship between the magnitude of noise reduction and change in health outcome was not possible.
		The majority of environmental noise health evidence, as reviewed in Appendix 15.3, has considered the question from the other direction, indicating that higher external environmental noise (and, necessarily, also internal noise levels without changes to insulation) at locations where people are present in buildings for extended periods (i.e. residences, schools) is associated with higher risk of adverse health outcomes. Taking this together with the 'interventions' evidence, the inference that reducing internal noise levels would reduce this risk is considered reasonable and is very widely applied through national policy and the noise management measures employed at other airports, which routinely include sound insulation.
		We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.
		Particularly as "Thanet faces a number of key challenges in relation to access to care, quality of care, health inequalities and complex vulnerable patients." Individuals present with "signi ^D icant Health Inequalities: life expectancy lower than national average" and "high incidence of CVD [Cardiovascular Disease] and COPD [Chronic Obstructive Pulmonary Disease]", there are "concerns re numbers of late presentations of Cancer", as well as the fact that "frailty affects patients earlier ie 94 years in some wards" and "mental health is a concern with higher than average levels of depressions and self harm ¹² "
Ns.1.6	The Applicant	PHE [RR-1608]
		Annoyance was not included as a health outcome, as recommended by the WHO ⁶ and the Interdepartmental Group on Costs and Benefits Noise (IGCBN) ⁷ .
		Can the Applicant express the noise impacts in terms of Disability Adjusted Life Years (DALYs) ⁸ and in monetary terms using the methodologies in [5,6]?

¹² Thanet Clinical Commissioning Group Governing Body Agenda (12 June 2018) Local Care Plan Report and Integrating Health and Social Care in Thanet April 2018 Overall Page 40 of 220 **REP 1-019 and Attached SJH_06**

	Applicant's Response:
	Yes, in light of the request from PHE, an additional assessment expressing potential noise exposure into Disability
	Adjusted Life Years, and conversion into financial terms will be provided at Deadline 4. However, the Applicant considers
	that such a methodology is more appropriate at the strategic/policy level (i.e. when comparing one airport to another) for
	entry into a cost benefit analysis. This methodology has less value at a project level, as it tends to mask not only the nature
	of the
	potential health outcome from noise (e.g. annoyance, impacts on academic performance, cognitive function, sleep

⁶WHO Burden of Disease from Environmental Noise, 2012

⁷ Defra/Interdepartmental Group on Costs and Benefits Noise Subject Group, 2014

⁸ Appendix 12.3 does refer to costed WebTag which address DALY's

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		disturbance etc.), but also the relative geographic distribution of potential effects. As a consequence the final financial value would not add any additional value to the investigation and mitigation of potential health outcome, and the consideration of health outcome might even be lost when considered against the net socio-economic benefit of the proposed development.
		The prevalence of mental health issues is greater in Ramsgate than in the Thanet area as a whole ¹³ . As of May this year Ramsgate will not have experienced Manston aviation noise for 5 years. Noise annoyance increases where populations become newly exposed to noise 18. Further, nearly 70% of the Relevant Representations submitted to the Planning Inspectorate cited noise, noise annoyance, noise sensitivity as a significant factor against the proposed development proceeding. It has been found that psychological aspects such as noise annoyance and noise sensitivity play important roles in the association between environmental noise and adverse effects on health ¹⁴ .
		Applicant's proposal will impact the Indoor Air Quality as well as Outdoor Air Quality. There is a proven correlation between inadequate ventilation and poor Indoor Air Quality in schools and poor pupil performance ¹⁵ . Andrew ScottClark, Director of Public Health Kent County Council: "[Thanet's] local health economy is struggling to deliver sustainable health care services and the organisations that are responsible for delivering these (both commissioning and providing) will need to be consultedas clearly both the construction and the operation phase may have impact on local health services; services that are currently under signi ^{Pi} cant ^{Pi} nancial and capacity pressure ^{5°} ".

¹³ Evidenced in REP3-056

¹⁴ Evidenced in REP3-056

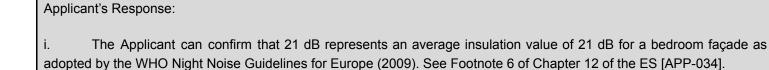
¹⁵ Evidenced in REP3-056

¹⁶ Evidenced in REP3-056

		"Currently, NHS ^D igures show Thanet to be the fourth worst area in the country for the number of GPs per
		patient, with just one doctor for every 6,944 people, which puts Thanet among the bottom 6± in England
		5 <mark>'".</mark>
		"As of 58 February 645 ³ , it has been announced that from Spring 6465 the nearest emergency stroke services
		to Ramsgate will be William Harvey Hospital in Ashford over an hour away from Ramsgate ¹⁸ ".
		We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.
Ns.1.7	The Applicant	PHE (RR-1608]
		The assessment of night-time awakenings is based on an assumption of an outside to inside sound level difference of 21 dB (assumed to be A-weighted) [APP-057].
		i. Confirm that this is the yearly average referenced in the WHO Night Noise Guidelines.
		ii. The figure of 21dB was derived specifically to be used with the annual averaged Lnight metric. Explain why it is appropriate to apply a yearly average to a noise event assessment.
		iii. Provide separate assessments for windows open and windows closed scenarios.

¹⁷ Evidenced in REP3-056

¹⁸ Evidenced in REP3-056



ii. The average figure concerns the average insulation provided by a window and does not change with the noise indicator used. The use of the yearly average noise reduction is consistent with the use of average aircraft forecasts to provide an assessment of the typical noise exposure. In addition, use of an absolute value for the noise insulation of a window, either open or closed, will not change the conclusions of the significance assessment. This is demonstrated below.

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		iii. The Applicant has undertaken assessments for windows open and windows closed. In addition to the 21 dB average insulation figure, the WHO Night Noise Guidelines for Europe (2009) provide figures for open and closed windows of 15 dB and 30 dB respectively.
		In Appendix 12.3 of the ES [APP-057], it was derived that 18 aircraft noise events at 80 dB LASmax will induce one additional awakening using the 21 dB figure for noise insulation. For closed windows 29 aircraft noise events at 80 dB LASmax will induce one additional awakening using the 30 dB figure for noise insulation. For open windows 14 aircraft noise events at 80 dB LASmax will induce one additional awakening using the 15 dB figure for noise insulation. During the maximum forecast year an average of seven night-time flights are forecast, hence aircraft noise alone will not typically result in additional awakenings in the open, average or closed window scenarios.
		We respectfully request Applicant provide supporting evidence of the above with regard to a population who has never experienced aviation noise before and with a large number of sensitive and vulnerable individuals including but not limited to the elderly and children.
		We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.

Ns.1.8	The Applicant	PHE (RR- 1608]
		PHE believe there is evidence which suggests that quiet urban areas can have both a direct beneficial health effect and
		can also help restore or compensate for the adverse health effects of noise in the environment ⁹ . Research from the
		Netherlands suggests that people living in noisy areas appear to have a greater need for areas offering quiet than people
		not exposed to noise at home ¹⁰ .
		PHE believe the proposed sound insulation scheme will not protect amenity spaces (such as private gardens) from
		increased noise exposure. Furthermore, although public Quiet Areas were included in the assessment of noise sensitive
		receptors, none were identified within the study area. No health impacts were recorded due to increased noise exposure in
		public green spaces, since none were identified as receptors [APP-058].

⁹ Health Council of the Netherlands Publication no. 2006/12, 2006 LIFE09 ENV/NL/000423, QSIDE-

¹⁰ The positive effects of quiet façades and quiet urban areas on traffic noise annoyance and sleep disturbance COST TD0804, Soundscape of European Cities and Landscapes, 2013

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		Given the increased noise exposure in private amenity spaces (APP-034], does the Applicant propose to create new tranquil public spaces that are easily accessible to those communities exposed to increased noise from the Proposed Development?
		Applicant's Response: The Proposed Development is constrained to the red line boundary, limiting opportunities to create new tranquil public spaces that are easily accessible to those subject to an increase in noise. However, the Applicant is willing to support such initiatives through the Community Trust Fund if this is felt to be desirable in discussion with the Community Consultative Committee.
		This is absurd The Community Trust Fund is limited to a paltry amount circa less than 25 pence per person and for some unknown reason applies only to people who outwith Ramsgate and all the areas that will be significantly adversely affected.
		The location of the noise receptor as identified by PHE yet again highlights the fact that the base-line noise data is hinky, We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.

Ns.1.9	The Applicant	PHE (RR-1608]
		The ES states at paragraph 15.8.13[APP-034] that:
		"Construction noise would be temporary (with phased works) and subject to control by the CEMP ([APP-011] and Appendix 3.2 [APP-044]. No significant adverse impacts on health due to any temporary noise disturbance during construction are predicted".
		The construction phases are predicted to extend from 2019 to 2036 inclusive. It is not clear to what extent noise sensitive receptors will be exposed to increased noise levels from construction during multiple phases. Therefore it is not possible to make an assessment whether construction noise can be classified as "temporary" for all sensitive receivers.
		Define "temporary" within this context.
		Applicant's Response:
		Construction noise impacts are defined as 'temporary' because construction noise at sensitive receptors is unlikely to exceed the Significant Observed Adverse Effect Levels (SOAELs) for construction noise for periods longer than one month. This is

Ref No.	Respondent	Question
		because the works are phased, consist of discrete activities and will move around the construction site. The most intensive construction period will be phases 1 and 2 when the airport itself will be built over a period expected to be approximately two years. The intensity of construction activity will be significantly reduced during phases 3 and 4 which will be market led and take place over a much longer period.
		ES Tables 12.16 to 12.25 [APP-034] present construction noise predictions calculated over a period of one month when the activity is located closest to the sensitive receptor. In other months noise levels are likely to be lower than those presented in the tables.
		We respectfully request PHE is asked for his advice to determine and quantity the resulting environmental impact of the Applicant actions and inactions.
Ns.1.10	The Applicant	PHE (RR-1608]
		PHE understands that for aviation noise, noise modelling was based on indicative, rather than finalised flightpaths.
		Will the Applicant agree a strategy with relevant stakeholders to address this issue, and produce an additional HIA during the finalisation of flightpaths if consent is granted, to assess the full scale and distribution of localised impacts?

Applicant's Response:
As set out in ES Table 12.1 [APP-034], the exact airspace options, operating principles and aircraft flight paths will be
formalised through an Airspace Change Proposal (ACP), which is a separate consenting regime that would happen after
the grant of the DCO. The ACP will be submitted through the Civil Aviation Authority's (CAA) ACP and the potential noise
effects will be assessed following the CAA guidance within the Civil Aviation Publications (CAP). The ACP will therefore
provide opportunities for communities to engage on future airspace options through an extensive consultation process as
well as the preparation of a separate Environmental Statement to accompany the ACP.
ALAS SIL DE LA LA CAA DING LA LICE AND CAALLES
At A5 of the Process Workshop between CAA, PINS, and Applicant June 2017 within the CAA Interface
Document APP-086 it states at Agenda Item 5 that:
"It was agreed that Acceptance of the DCO submission by PINS would indicate that it has been accepted as a
Nationally Infrastructure Project; this would be an appropriate trigger for the ACP. CAA Legal requested that
Applicant formally propose this to the CAA for consideration".
The Statement of Common Ground Between Applicant and Civil Aviation Authority REP3-176 refers to a 11
July letter sent to CAA in relation to the timing of the Airspace Change Proposal and a 15 September 2017:
letter from CAA in relation to the timing of the Airspace Change Proposal.
As of 8 March 2019 Applicant has not formally submitted neither 1a or 2c Airspace Change Proposal to CAA
and this proposal has not started despite it being 7 months (29 weeks) since it was accepted as a NSIP.
This means an accurate picture as to the true worse case realistic environmental impact will not be
available until after the DCO is granted.
Further, this means that quantifying compensation with regard to noise and sound insulation
residential and school and community spaces, blight and relocation, loss of leisure, green spaces and
open spaces, will not be possible until after the DCO is granted.

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		The ACP would also provide an opportunity to produce an additional HIA following the finalisation of flight paths, and the Applicant commits to producing one at that stage.
		It should be noted that the prototype routes used for the assessment of aircraft noise were developed around design principles, namely 'avoid overflying populations', 'overfly populations' and 'swathe centreline'. An options appraisal of these principles is presented in Appendix 12.3: Methodology [APP-057], which, demonstrates that the variation in the population adversely effected and significantly adversely effected by noise across the design principles would be less than 1%, based on the operating conditions modelled.
		The flight swathes are right over Ramsgate - the largest town of Thanet.
Ns.1.11	The Applicant	Paragraph 12.2.2 of ES (APP-034] Responses to Scoping Report (APP-043]
	CAA	Paragraph 12.2.2 of the ES lists CAA as a respondent to the Scoping Report consultation. Table A12.1.1 [APP-057] and Table 4.3 [APP-043] do not record the CAA response.
		Can the Applicant point to where in its application documents the CAA's response can be found?

Applicant's Response:

Paragraph 12.2.2 of the ES [APP-034] correctly states that the CAA was consulted with respect to noise and vibration. Appendix 1.2 [APP-057] includes the Scoping Opinion and provides a list of prescribed consultation bodies notified by the Planning Inspectorate under regulation 9(1)(a) of the Infrastructure Planning regulations, of which the CAA was one of those bodies. Paragraph 12.2.2 of the ES incorrectly lists the CAA as a respondent to the Scoping Report consultation. In fact, the CAA did not directly provide a response to the Scoping Report. The CAA were consulted with on a number of other occasions outside of the formal EIA scoping process

A record of the meetings held with the CAA is provided at Appendix Ns.1.11 in TR020002/D3/FWQ/Appendices.

Ref No.	Respondent	Question
Ns.1.12	The Applicant	Vibration
		Comparison of ES Table 12.11 and ES Table 12.26 [APP-034] potentially shows an exceedence of the 3mms ⁻¹ continuous vibration criteria for protected or potentially vulnerable buildings.
		Provide further clarification regarding the conclusion that the peak particle velocity (PPV) is less than the adopted impact criteria for onset of cosmetic damage drawn in ES paragraph 12.7.30 [APP-034] in light of the predicted 3.6mms ⁻¹ external vibration.
		Applicant's Response:
		Firstly, at this stage it is not known if any buildings in close proximity to vibratory compaction are 'vulnerable' and as such a precautionary approach has been taken. As defined in Table 12.11 of the ES [APP-034] the most onerous criteria for cosmetic damage to structurally sound buildings is 6 mms ⁻¹ which is higher than any of the vibration predictions presented in the assessment.
		Secondly, the peak particle velocity (PPV) is likely to be less than the adopted impact criteria for onset of cosmetic damage of significant effects at receptors exposed to vibration from vibratory compaction partly because contractors will be required to use measures to reduce vibration generated by controlling drum vibration amplitude, this requirement is captured in the CEMP and any such activity is expected to be the subject of a Section 61 application to Thanet District Council.
		ES Table 12.26 presents predictions of construction vibration at sensitive receptors during vibratory compaction for highway improvement works. At each receptor a range of PPV values are presented to reflect a range of potential drum vibration operation (See paragraph 12.7.29 of the ES [APP-034]). The lowest value in the range represents the vibratory compactor operating at a drum amplitude of 0.5mm. The highest value in the range represents the vibratory compactor
		operating at a drum amplitude of 1.5mm. At Spitfire Way a range of 0.7 to 3.6mms ⁻¹ PPV are predicted. Whilst the upper value of the range exceeds the 3mms ⁻¹ continuous vibration criteria for protected or potentially vulnerable buildings, the lower value in the range is below the criteria. This indicates that with the control measures indicated in the CEMP and enforced by TDC, works can

Ref No.	Respondent	Question
		be undertaken at a drum amplitude that would not lead to exceedances of the most onerous criteria for cosmetic building damage at vulnerable buildings.
		In this regard it is a requirement of the CEMP that:
		 Contractors use Best Practicable Means (BPM) to minimise noise and vibration at neighbouring residential properties and other sensitive receptors arising from construction activities; and Contractors obtain consents from the relevant local authority under Section 61 of the Control of Pollution Act 197412 for the proposed construction works, excluding non-intrusive surveys. Applications will be made to the relevant local authority. As stated in paragraph 12.7.32, the management of vibration is consistent with the requirement for the contractor to use
		BPM to reduce noise and vibration from construction works. Typically a contractor's Section 61 application would demonstrate through prediction how works are to be undertaken according to the principles of BPM. On this basis the Applicant considers that it is unlikely that vibration generated by compaction will lead to building damage at receptors close to the works.
Ns.1.13	The Applicant	LOAEL and SOAEL [APP-034]
		It is not clear from the ES (chapter 12 [APP-034]) how many properties would fall between the LOAEL and SOAEL, where significant adverse effects could be experienced.
		The methodology section of the ES explains that levels above the SOAEL will be significant for EIA purposes, and that levels between LOAEL and SOAEL will be evaluated against a list of considerations to determine the magnitude of significance of the effect under the EIA Regulations (paragraph 12.6.75 [APP-034]).

Ref No.	Respondent	Question
		The assessment for aircraft noise reports, for impacts on dwellings in Year 20, that 13,046 dwellings are above the LOAEL and 115 dwellings above the SOAEL. At night time 16,465 dwellings are reported above the LOAEL and 225 dwellings above the SOAEL (Table 12.27 [APP-034]).
		How have the dwellings between the LOAEL & SOAEL been assessed in terms of EIA significance?
		Applicant's Response:
		The method for evaluating the significance of aviation noise at dwellings between the LOAEL and SOAEL in terms of EIA significance is described in paragraphs 12.6.27 to 12.6.30 and paragraphs 12.6.76 and 12.6.79 of the ES [APP-034].
		The assessment of EIA significance at dwellings between the LOAEL and SOAEL is set out in paragraphs 12.7.64 to 12.7.72 and Table 12.29 of the ES [APP-034].
Ns.1.14	The Applicant	Noise modelling
	CAA	Paragraph 9.86 of the Planning Statement [APP-080] states:
		"The noise assessment has been prepared without exact details relating to airspace options ¹¹ , operating principles and aircraft flight paths. These will be formalised through an Airspace Change Proposal (ACP) which is a separate consenting regime that will happen after any DCO is granted for the Proposed Development. The ACP will be submitted through the Civil Aviation Authority's (CAA) airspace change process and the potential noise effects will be assessed again at that time following the CAA guidance within the Civil Aviation Publications (CAP). The ACP will therefore provide opportunities for communities to engage on future airspace options through an extensive consultation process as well as the preparation of a separate Environmental Statement to accompany the ACP."

¹¹ ExA emphasis

Ref No.	Respondent	Question
		Could any Airspace Change Proposal (ACP) give rise to a scenario which has not been assessed in the Applicant's ES [APP-033 to 036]?
		Applicant's Response:
		The Airspace Change Proposal (ACP) could not give rise to a scenario which has not been assessed in the ES. As agreed in the CAA/PINS Process Workshop held in June 2017, the Applicant in its ES provided the 'worst credible' aircraft flight paths with regard to the environmental impact of approach and departure operations. The CAA would be looking for the 'best possible' flightpaths to be proposed in considering an environmental assessment in its decision-making process. The Applicant would therefore not submit a proposal to the CAA which is outside the assessment in the ES.
		Paragraph 12.2.2 of the ES incorrectly lists the CAA as a respondent to the Scoping Report consultation. In fact, the CAA did not provide a response to the Scoping Report. The CAA was consulted on a number of occasions outside of the scoping process (details of the meeting dates and issues discussed are provided at Appendix Ns.1.11 in TR020002/D3/FWQ/Appendices). However, within the CAP1616 requirement (Annex B) entails the consideration and assessment (qualitative and where possible quantitative) of environmental impacts that can arise from ACPs, notably noise, CO ₂ emissions and local air quality and the presentation and explanation of those impacts to stakeholders. The inclusion of environmental impacts (assessment and report) forms part of the CAA's decision-making process for airspace changes.
		Furthermore, Section 70 (2)(d) of the Transport Act 2000 states that the CAA must "take account of any guidance on environmental objectives given to the CAA by the Secretary of State after the coming into force of this section" when making decisions on airspace change proposals. The guidance from the Secretary of State on environmental objectives is the Air Navigation Guidance 2017.47 It applies to the whole of the UK.
Ns.1.15	The Applicant	Demolition

Ref No.	Respondent	Question
		ES figure 12.3a [APP-042] sets out the construction noise assessment phasing assumptions. These show demolition of the terminal in construction phase 2 whereas ES paragraph 3.3.44 [APP-033] states that demolition will occur in phase 1. i. Confirm whether demolition of the terminal is scheduled for phase 1 or phase 2 of construction. ii. In confirming the demolition phasing, also confirm to what extent this alters the conclusions reached in the assessment of construction noise within the ES. Applicant's Response:
		 i. Demolition of the existing terminal will take place in phase 1. ii. The scheduling of demolition of the terminal in Phase 1 does not alter the conclusions of the construction noise assessment.
Ns.1.16	The Applicant	Baseline data The baseline data presented in ES Table 12.2 [APP-034]; Appendix 12.4 baseline survey data and Appendix 12.4, Table A12.4.8 appear to differ by 1-2dB [APP-057]. These apparent discrepancies relate to day, evening and night time noise data sets. Can the Applicant explain the apparent discrepancies and the implications of the different noise values for the assessment of likely significant effects?
		Applicant's Response:

Ref No.	Respondent	Question
		The Applicant has identified typographical errors in ES table A12.4.8 and for one survey location (LT1) in Appendix 12.4. The baseline levels in ES table 12.2 have been checked and accurately reflect the recorded survey data. Any significance conclusions based on baseline noise data have been checked for consistency against the baseline data and are robust.
Ns.1.17	The Applicant	Road traffic noise
		TA Volume 17, Appendix E, Table 1.7 [APP-063] suggests that there will be a peak in passenger traffic to the airport between 03:00-06:00.
		Since the LA10,18hour metric used in CRTN accounts for traffic flows between 06:00 – 24:00, confirm how road traffic noise has been accounted for in the noise assessment before 06:00.
		Applicant's Response: An assessment of night time road traffic noise was not presented in the ES as noise was screened out of the assessment based on traffic data available for the ES. The Transport Assessment is being revised using Kent County Council's model, hence revised noise assessments, including a night time noise assessment, will be provided at Deadline 4.
Ns.1.18	The Applicant	Traffic and aircraft noise
		Aircraft and traffic noise are assessed separately.
		It is not immediately apparent how the assessment of noise effects has taken into account combined noise emissions from increased road traffic, airport ground noise and aviation noise on relevant receptors.
		Explain the extent to which and how this has been assessed.

Ref No.	Respondent	Question
		Applicant's Response: As set out in paragraphs 12.6.15 to 12.6.17 of the ES [APP-34] the assessment of significance of aviation noise considers the combined effects of aircraft air noise and airside ground noise by combining the noise exposure from all sources. Paragraphs 12.7.73 to 12.7.77 and Table 12.30 present the assessment of indirect effects of road traffic noise. The assessment demonstrates that there will be a negligible increase in traffic noise on all roads where the development is expected to result in a change in road traffic volumes. This means that it is unlikely that the road traffic noise will contribute to a combined noise effect in combination with noise from other sources.
Ns.1.19	The CAA	Noise methodology ES Section 12.1 and ES Table 12.1 describe limitations and assumptions used in the preparation of the ES [APP-034]. The key assumptions are: • Application of professional judgement used to determine the likely equipment, working methods and times during construction;
		 Precise airspace arrangements are subject to the Airspace Change Process and are based on prototype arrangements that consider both overfly populations/avoid populations options; Aircraft in future are assumed to be as noisy as today (although a trend of reducing noise is likely); and The operational aircraft noise assessment uses an average winter's day rather than an average summer's day on the basis that due to importation of perishable vegetables, the largest increase in ATMs is likely to be during the winter months. The CAA CAP1616a document states that an average summer's day should be used as the basis for assessments of noise.

Ref No.	Respondent	Question
		i. Does the CAA consider that the assessment of average winter's day aircraft noise is representative of the proposed airport operations?
		ii. Is an average summer's day assessment also required?
		Applicant's Response:
		N/A
Ns.1.20	The Applicant	ES Appendix 12.3 – Noise methodology [APP-057]
		ES Appendix 12.1[APP-057] response to PINS comments states that air noise modelling for the ES has been undertaken using Aviation Environmental Design Tool (AEDT).
		ES Appendix 12.3.1[APP-057] in the 'modelling overview' states that LimA has been used for ground-based noise source modelling and that AEDT v2d and Integrated Noise Model (INM) v7.0 have been used for aircraft air noise modelling.
		ES Appendix 12.3.'Choices of noise model' states that INM v7.0 modelling has been undertaken and that AEDT has not been used because at the point in time when options appraisal and work for the PEIR commenced early versions of AEDT were not endorsed for use in the UK.
		ES paragraph 12.6.17[APP-034] states that the INM rather than the AEDT has been used to model noise and that this approach is consistent with the approach set out in CAP1616a.
		There are inconsistencies in the ES notably:
		Appendix 12.1 response to PINS comments;
		ES Appendix 12.3.1 modelling overview; ES Appendix 13.3 absises of poice model and
		ES Appendix 12.3.1 modelling overview;ES Appendix 12.3 choices of noise model and

Ref No.	Respondent	Question
		ES paragraph 12.6.17 regarding the description of the modelling approach taken.
		i. Confirm whether AEDT modelling has been undertaken and is the information used to inform the assessment.
		ii. If not, provide further justification for the use of INM modelling. Any justification should provide commentary on the outcomes of historic INM modelling in drawing conclusions regarding noise impacts.
		Applicant's Response:
		i. The Applicant can confirm that AEDT has not been used for modelling outputs presented within the ES. All modelling outputs presented within the ES use INM 7.0d. INM is used at many airports in the UK.
		ii. In addition to describing the model used for the aircraft noise assessment ES Appendix 12.3.'Choices of noise model' [APP-057] confirms that:
		a. AEDT "gives similar if not identical results to INM 7.0d"; and
		b. all commercially available aviation noise models (AEDT, ANCON and INM) must conform to standards for aircraft noise prediction produced by the ICAO, European Civil Aviation Conference (ECAC) and Society of Automotive Engineers (SAE), namely SAE-AIR-1845 (1986)6 and ECAC Doc.29 (2016).
		INM was first used for assessing aircraft noise for the Proposed Development in 2016 to define the extent of Category 3 land referencing interests and consultation areas as well as to consider mitigation measures such as flight paths and displaced thresholds. Paragraph 1.19 of CAP1616a Airspace design: Environmental requirements technical annex states that "For consistency and comparison purposes, if a noise model is already in use at an airport, the same model should be used for the assessment of any airspace change proposal related to that airport." In this case, given the comparable results likely to be derived from INM and AEDT it was not considered necessary to adopt a new model at the point where the assessment itself was completed.

Ref No.	Respondent	Question
Ns.1.21	The Applicant	Meteorological data
		When discussing average meteorological conditions, ES Appendix 12.3 [APP-057] states that INM standard settings were appropriate.
		With reference to historic meteorological data, explain why INM standard settings are appropriate to represent meteorological conditions at the site.
		Applicant's Response:
		According to ECAC. Doc 29 'Report on Standard Method of Computing Noise Contours around Civil Airports', 4th ed, vol. 2, 2016, the standard INM reference conditions are widely used for airport noise studies. The document states that these settings are appropriate when the average conditions are within the following envelope, which is the case for Manston Airport:
		 Air temperature less than 30 C Product of air temperature (C) and relative humidity (percent) greater than 500 Wind speed less than 8 m/s (15 knots)
Ns.1.22	The Applicant	Construction noise
		ES Appendix 12.3, Tables A12.3.27 - A12.3.28[APP-057] include 5-10dB reductions for local screening or site mitigation for some or all construction works. The anticipated reduction which is resultant from this action is not made explicit in the construction noise assessment eg. ES Tables 12.16 – 25 and ES section 12.5 [APP-034] suggest that up to 5dB reduction may be achieved.
		i. Provide clarification of this point.

Ref No.	Respondent	Question
		ii. Provide construction noise assessment tables which set out precisely where 5 or 10 dB reductions are anticipated to be achieved and with reference to the specific mitigation necessary to secure this reduction.
		Applicant's Response:
		 i. Screening of construction noise has been incorporated into the assessment according to the guidance set out in BS 5228- 1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites - Part 1: Noise. In the assessment of construction noise:
		No screening of construction noise was incorporated in situations where works were undertaken in direct line of sight of sensitive receptors;
		b. 5 dB ("partial screening" as defined in BS5228) was incorporated in the predictions where construction works would be partially screened by existing barriers or site hoardings, for example when there is a large separation distance between the receptor / source and screen / hoarding
		c. 10dB ("full screening" as defined in BS5228) was incorporated in the predictions where construction works would be fully screened by existing or new buildings, barriers or site hoardings. For example when barriers are located close to the source of noise or there is a building separating the construction works from the receptors
		ii. The revised construction table is provided at Appendix Ns.1.22 in TR020002/D3/FWQ/Appendices
Ns.1.23	The Applicant	Multiple noise construction activities
		ES Appendix 12.3, Tables 12.3.31-33[APP-057] and ES Tables 12.16 to 12.24[APP-034] consider the individual effect of the loudest activity rather than the combined effect of multiple activities on a single receptor.
		Confirm what the combined impact of noise from different construction sound sources is for the assessed receptors.

Ref No.	Respondent	Question
		Applicant's Response: As stated in paragraph 12.7.11 of the ES, construction noise predictions for each activity presented in ES Tables 12.16 to
		12.24 [APP-034] present worst-case noise levels for each activity in that the expected noise levels are predicted for one month when plant and equipment is located in the part of the work site closest to the receptor. Noise levels could potentially be substantially lower on other days where the works are not as intense and as construction processes move progressively around the site. Given the duration of each construction phase and the size of the site it is considered that the results presented are representative of the combined impact because the combined impact at any one location would be the level from the nearest source. The noise levels provided in the ES therefore provide a robust and realistic worst-case assessment of the highest noise exposure at sensitive receptors within the vicinity of the works.
Ns.1.24	The Applicant	Airspace Change Process [APP-086]
	CAA Independent	ES Appendix 12.3[APP-057] discusses the potential noise effects relating to different aircraft flightpaths and selects a probable route that has been subject to assessment. The ES [APP-034] acknowledges that the flight path may be subject to change since it is subject to approval through the Airspace Change Process.
	Commission on Civil Aviation Noise (ICCAN)	i. Can the Applicant provide commentary on any progress made in relation to the airspace change process and the confirmation of specific flight paths for Manston Airport?
		ii. The Airspace Change Process is discussed in Section 6 of [APP-086]. What is the Applicant's understanding of the role of ICCAN in this process?
		Applicant's Response:
		i. The Applicant has submitted a Statement of Need (SoN) for the Airspace Change Process (ACP) to the CAA which identifies the requirement for appropriate airspace and approach and departure Instrument Flight Procedures (IFPs) which

Ref No.	Respondent	Question
		will be designed within the swathes and assessed as part of air space change. The Applicant is awaiting the allocation of a Case Officer and an initial assessment meeting with the CAA Safety and Airspace Regulation Group (SARG) to provide a provisional indication of the appropriate scaling level of the proposal, in accordance with CAP 1616, Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements. ii. ICCAN will become the independent UK body responsible for creating, compiling and disseminating best practice to the aviation industry on the management of civil aviation noise and advising government in this area. The Secretary of
		State's Air Navigation Guidance 2017 requires the CAA, in exercising its air navigation functions, also to take account of any best- practice guidance which ICCAN may publish on aspects of aviation noise. The CAA expects change sponsors, in this case the Applicant, to be mindful of ICCAN's role and guidance throughout the airspace change process and ICCAN will be involved with ACPs at various points within the process alongside producing best-practice guidance on all aspects of aviation noise.
		ICCAN will develop and maintain best practice guidance on aviation noise for participants in the airspace change process. This guidance should be considered by the change sponsor, and if a sponsor deviates from ICCAN guidance it should explain why. The CAA will review how the change sponsor has demonstrated that it has considered any relevant best practice from ICCAN in developing the ACP, and the CAA will factor relevant best-practice considerations into its report for consideration by the CAA decision-maker. Within the airspace change process, ICCAN's role is to:
		a. provide best-practice guidance on the best noise management techniques; andb. provide best-practice guidance on the accessibility of noise information.
Ns.1.25	The Applicant	Airport car parking
		The list of sound source data in ES Appendix 12.3[APP-057] excludes airport car parking.
		Confirm how airport car parking noise has been assessed.

Ref No.	Respondent	Question
		Applicant's Response: Noise from the car park was originally only considered as a reflection of the traffic model which adopted a single point of entry to the road network with the resultant link flow changes included in the noise assessment. It was carried out in this way as the car park is relatively distant from potentially effected receptors and movements within the car park are slow and as such do not generate noise levels warranting further assessment. Nonetheless, an assessment has now been carried out which supports the earlier decision to omit the car park from further assessment. This assessment has now been carried out and demonstrates that parking noise will be significantly below the ambient noise levels at the nearest sensitive receptors and as such does not need to be included in the combined
Ns.1.26	The Applicant	noise model. The results of the assessment are shown in Appendix Ns.1.25 in TR020002/D3/FWQ/Appendices. Engine ground running ES Appendix 12.3 [APP-057] 'engine ground running' states that the most suitable location for performing Engine Ground
		Runs is 50m east of the runway centre no more than 50 times/year and lasting 10 minutes. The 'embedded mitigation' section of the appendix also states that the modelling assumes no runs will take place between 23.00-07.00. ES appendix 12.3 states that no engine ground runs will take place between 23.00 and 07.00 and uses this as a modelling assumption. However, Section6 of the noise mitigation plan [APP-009] states that open field testing may be carried out 'where operationally urgent and carried out within a designated test area'.
		 i. Confirm which of these statements is correct. ii. Where night-time provision for engine ground runs is sought, confirm how this would affect the forecast LAeq,8hr.

Ref No.	Respondent	Question
		Applicant's Response: i. The statement in ES Appendix 12.3 is correct and the updated Noise Mitigation Plan submitted for Deadline 3 [TR020002/D3/2.4] has been amended such that there will be an absolute prohibition on night time open field testing. ii. Not applicable given the answer to i) above.
Ns.1.27	The Applicant	Noise Mitigation Plan (APP-009] The noise mitigation plan states that runway preferences for take-off on runway 28 and landing on runway 10 to avoid overflying Ramsgate, although the ES [APP-034] recognises that such operations will be prevented at higher volumes of air traffic movements. Confirm how many ATMs day/night will prevent such operation and the likely year of change of operation.
		Applicant's Response: The Applicant has made a study into this mode of operation using the planned physical taxiway and runway configuration shown within the ES. The study indicates that the cargo / airliner ATM rate would need to be more than 5 per hour, a frequency not expected at full operation and above the ATM cap that is now being proposed.
Ns.1.28	The Applicant	Noise control and quota counts Provide details of other noise control measures, including quota counts established at other UK airports of comparable size/aircraft composition to provide context for the proposed mitigation plan (APP-009].

Ref No.	Respondent	Question
		Applicant's Response:
		The best source of details about noise control measures at other UK airports are either their web site (which may set out their noise management and compensation policies), airport Masterplans or airport Noise Action Plans. The latter are a legal requirement under European Union Directive 2002/49/EC for airports with over 50,000 aircraft movements pa or which are in close proximity to densely built up areas with over 100,000 population. The Directive was transposed by the UK Government in the Environmental Noise (England) Regulations 2006. In 2013 DEFRA produced Guidance for Airport Operators to produce noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended)
		Airports designated by the Secretary of State for noise purposes (i.e. Heathrow, Gatwick and Stansted) are too large to offer a sensible comparison with the anticipated scale of development at Manston, as are other larger airports required to produce noise action plans e.g. Manchester, Luton, Birmingham and Edinburgh and Glasgow.
		Airports in the UK that are closest in terms of equivalence to the scale and nature of operations envisaged at Manston (i.e. aircraft mix - pax traffic of up to 2-3m and freighter dominated cargo operations), some night time operations and a relatively small population within key daytime and night-time noise contours are:
		 Early stage of Manston (MSE) development: Prestwick, Doncaster Sheffield and Aberdeen More mature stage of MSE development: East Midlands
		Prestwick (PIK)
		PIK has no night time restrictions and there is no sign of even a local agreement offering controls.
		Doncaster Sheffield (DSA)
		DSA has not prepared a Noise Action Plan (it does not meet the criteria requiring it to do so), but it does monitor noise and report monthly on it to Doncaster Metropolitan Borough Council and the Airport Consultative Committee and has committed

Ref No.	Respondent	Question
		to a Quiet Operations Policy covering operational measures such as the design and regulation of arrival and departure routes, preferential runway usage, minimisation of reverse thrust on landing and a night noise budget. The latter limits the noisiest aircraft types at Night and is subject to a Quota Count system. DSA also operates a voluntary Sound Insulation Grant Scheme providing residents with financial assistance towards the installation of sound proof glazing. The scheme has so far been extended to 247 properties.
		Aberdeen
		However, Aberdeen, which currently has a passenger throughput of 3pm, a significant oil focused helicopter operation taking it over 50,000 ATMs, some of which of necessity operate at night, does have a Noise Action Plan which contains a package of measures designed to minimise and mitigate the effects of aircraft noise.
		This includes control measures such as:
		a noise insulation scheme. Following a public consultation exercise carried out during 2010, the airport will continue to support noise insulation measures for residential properties within the 66 decibel contour area.
		adopting strict DfT imposed day and night-time noise restrictions, which are legally required at larger airports such as Heathrow, on a voluntary basis by AIAL.
		Noisier 'Chapter 2 aircraft' have been banned
		 for a number of years from landing at Aberdeen and the imposition of differential landing charges encourage airlines to operate quieter aircraft types.
		East Midlands

Ref No.	Respondent	Question
		Noise control measures are set in the East Midland Sustainable Development Plan (2015) and a very thorough Night Noise Action Plan covering the period 2019-23. The latter includes the following objectives and discusses a range of measures to help deliver them:
		- Encourage and incentivise the use of quieter aircraft and;
		- Optimise aircraft operating procedures at the airport to minimise noise and;
		 Work with local planning authorities to discourage new noise sensitive development in areas affected by aircraft noise and;
		 Continually improve how we work in collaboration with communities, regulators and industry partners to explore options to reduce noise from aircraft operations.
		There is also a commitment to ensure Chapter 4 compliant aircraft for night time movements as soon as possible, manage aircraft using the airport according to their QC count (especially at night) and to stay within the existing night noise envelope.
		The conclusions we draw based on these comparators, is that when the airport re-opens the requirement for significant noise controls will be small, but that above [agreed] thresholds, and once the airport has again become a statutory undertaker, then increasingly sophisticated control mechanisms will be required and that the best mechanism for achieving this is the commitment to produce a Night Noise Plan as part of the conditions to the DCO approval.
Ns.1.29	The Applicant	Noise Mitigation Plan (APP-009]
		Section 3 of the Plan states:

Ref No.	Respondent	Question
		"The airport operator will provide reasonable levels of noise insulation and ventilation 12 for schools and community buildings within the 60 dB LAeq (16 hour) day time contour." Specify what is meant by reasonable in this context.
		Applicant's Response: "reasonable" in this context means:
		 Taking account of the existing building structure: a level of insulation and ventilation designed to achieve acoustic conditions inside classrooms consistent with BB93: acoustic design of schools – performance standards; or where existing conditions already exceed acoustic conditions defined in BB93, a level of insulation and ventilation designed to maintain existing acoustic conditions inside classrooms Alternative ventilation which avoids overheating in classrooms.
Ns.1.30	The Applicant	Noise Mitigation Plan (APP-009] The mitigation provisions relating to noise insulation and relocation in sections 2 and 4 are subject to eligibility criteria, which are briefly described in the noise mitigation plan. Provide further details regarding the eligibility criteria and who would be responsible for administering any mitigation payments.
		Applicant's Response:

¹² ExA emphasis

Ref No.	Respondent	Question
		Section 2 of the Noise Mitigation Plan [APP-009] sets out the proposed Noise Insulation Scheme that would be operated by the airport indicating both daytime and night-time eligibility contours. The scheme will be operated in a similar way to that at East Midlands Airport, which can be found at Appendix Ns.1.30 in TR020002/D3/FWQ/Appendices.
		Further information will be included within the updated Noise Mitigation Plan expected to be provided at Deadline 4.
Ns.1.31	The Applicant	Noise Mitigation Plan (APP-009]
		Section 14 of the noise mitigation plan limits the spending of community trust fund monies to the 5 <mark>0dB LAeq,16hr and 40dB LAeq,8hr contours.</mark>
		Explain why a wider area of effect such as the extent of the relevant Lasmax contours has not been adopted.
		Applicant's Response:
		The extent of the community trust fund has been set to reflect those receptors that may be adversely affected by aircraft noise. That is at the threshold consistent with the Daytime and Night Time LOAELS adopted for the assessment of effects. The extent of the LASmax contours is not part of the assessment of adverse effects. As shown in the Planning Practice Guidance on Noise, the fact that a sound can be heard does not mean that it has an adverse effect.
		COMMENT
		This does not make any sense.
		There are a large number of houses with gardens under the flight swathes, our football club, leisure areas, parks (circa 12 Ha), public gardens, marina, Royal Harbour, tennis courts, churches, school areas as well as Ramsgate Town Centre all described in more detail at REP3-056 at Pages 1-4 and at Section 11A-J, 12A-F and 13A-G all under the flight swathes.
		The idea is that we are presumably compensated for this loss. At about 50 pence each a year is an insult and then to read that this communal benefit will go to those NOT under the flight swathe is illogical and quite frankly is

		As well as our sandy beaches which have been disregarded because they have been erroneously described as beside a road. Perhaps if you look on a flat map with no topography it looks like that but our beach is at the bottom of 150 foot cliff drop and is accessible by foot.
Ns.1.32	The Applicant	Caravan parks and camping sites (APP-034] Paragraph 11.4.32 of the ES [APP-034] states:
		"The Kent coast and the towns of Broadstairs, Margate and Ramsgate are popular tourist destinations resulting in numerous campsites, caravan site and holiday parks within the study area. It is likely that a proportion of the caravan sites are used for permanent residences as opposed to holiday lets. These are set out in Table 11.9 and the locations of those carried through to the Visual Assessment are shown in Figure 11.35."

Ref No. Respo	ent Question
	Paragraph 9.282 of the Planning Statement [APP-080] states: "The community of Manston, particularly in the area of Preston Road, Manston; in northern section of High Street, Manston; in southern section of High Street; Manston; Jubilee Cottages on Manston Road; PRoWs TR8, TR9, TR10 and TR22; Manston Court Caravan Site and Preston Parks are likely to experience significant daytime inter-related noise and visual effects in relation to visitor arrival and departure and any outdoor exhibits during the operational phase of the Proposed Development. The community of Manston may also experience significant inter-related noise and visual effects during the daytime, in both shared open spaces and indoor spaces (specifically residential properties at Preston Road, Manston; in northern section of High Street, Manston; in southern section of High Street; Manston; Jubilee Cottages on Manston Road; PRoWs TR8, TR9, TR10 and TR22; and Manston Court Caravan Site and Preston Parks). Effects on some indoor spaces are less likely to be significant if eligible residents take up the noise insulation scheme, however this scheme will not apply to caravan sites 13." i. What proportion of the caravan sites are used as permanent residences? ii. How have these caravan sites been assessed in the noise and vibration assessment? iii. How many permanent residences in Manston Court and Preston Parks will be significantly affected by inter- related noise and visual effects? iv. How does the Applicant propose to mitigate these significant effects?

¹³ ExA emphasis

Ref No.	Respondent	Question
		i. Based on liability to pay council tax, we understand that no caravans in Manston Court and only one in Preston Parks are permanent residences.
		ii. The caravan sites have been assessed as permanent residential dwellings in the noise and vibration assessment.
		iii. The reference to significant inter-related noise and visual effects in Chapter 18 of the ES and hence paragraph 9.282 of the Planning Statement is an error.
		iv. No further mitigation is proposed as there are no significant inter-related noise and visual effects in Manston Court and Preston Parks.
Ns.1.33	The Applicant	ES Noise contour maps (APP-042]
	CAA	Section 15 of the noise management plan [APP-009] states that the LAeq,16hr and LAeq,8hr are based on the average summer's day/night respectively.
		ES paragraph 12.7.44 [APP-034] makes it clear that the worst case is considered to be a typical busy day during winter time.
		Can the Applicant confirm:
		i. Whether the ES noise contour maps are based on the winter or summer day; and
		ii. whether the Category 3 interests have been identified based on the average summer's day or average winter's day scenarios?
		Applicant's Response:
		i. The Applicant can confirm that the ES noise contour maps are based on the average winter's day.

Ref No.	Respondent	Question
		ii. The Applicant can confirm that the Category 3 interests are based on the average winter's day.
Ns.1.34	The Applicant	Register of Environmental Actions and Commitments (APP-010] Confirm whether the Register of Environmental Actions and Commitments should include an entry regarding operational noise impacts on human receptors.
		Applicant's Response: The Applicant confirms that a revised Register of Environmental Actions and Commitments (REAC) will be submitted at Deadline 4 and will include an entry regarding operational noise impacts on human receptors. These impacts are addressed in the Construction Environmental Management Plan [APP-011] and are the subject of mitigation in the Noise Mitigation Plan [APP-009], both of which are referred to in the REAC.
Ns.1.35	The Applicant	Take-offs Runway 28/Landing Runway 10 Based on historic monitoring data and previous airport usage, confirm how probable the proposed runway preferences identified in the noise mitigation plan (APP-009] are for take-offs on runway 28/landing on runway 10. Applicant's Response: When weather conditions allow, and taking into account other operational and safety considerations including runway utilisation, the Applicant, then Airport operator / owner, will seek to operate take-offs from Runway 28 and landings on Runway 10 subject to such operations being in accordance with CAA guidance and the aircraft operator's own limitations and safety management systems.

Ref No.	Respondent	Question
		The Applicant has made a study into the use of the above 'Preferential Runway Strategy'; however this will not always be achievable due to prevailing wind and runway conditions. The results of the study were sensitive to rain fall and changes in wind direction. However, the study shows that around 70% of landings could be made to Runway 10 and that up to 80% of take offs could be made from Runway 28.
		The anticipated capability to use 'Preferential Runway Strategy' is due mainly to improved aircraft performance and regulatory changes, but the recognition that historically previous Manston Airport owners or operators had neither considered a 'Preferential Runway Strategy' nor planned for this type of operation when the actual weather, and forecasts, allowed. The navigational equipment (instrument landing system (ILS)) that existed previously was only of category 1 precision and, in the case of runway 10, lacked a glide path indicator. The development plan for the airport includes the installation of full category 3 ILS on both runways. The comparative lack of precision coupled with the absence of a glide path indicator on runway 10 meant that the aircraft had to rely on visual methods to perform a landing; thus landing on runway 10 required good visibility and consequently 28 was the preferred landing runway in many cases of less than good visibility (such as rain).
		At busy airports, switching from one runway direction to the other causes delays and is therefore discouraged. However, at current forecast Manston Air Traffic Movements (ATM), an average of less than 3 movements (a landing and a take-off) per hour will take place. This allows for judicious runway switching and utilisation without requiring delays or holding circuits.
Ns.1.36	The Applicant	N60dbLsmax (APP-042] The ES provides N60 contours for night time noise in Figures 12.12 and 12.13 [APP-042]. In line with the requirements of the Air Navigation Guidance 2017 – paragraph 3.11 in reference 7 of Chapter 12 of ES (APP-034], confirm whether N65 daytime contour maps have been prepared for the Proposed Development.
		Applicant's Response:

Ref No.	Respondent	Question
		N65 daytime contours were not originally prepared for the Proposed Development. N65 contours are supplementary indicators which may be used to describe the nature of a noise impact, they are not necessary for identifying significant effects in accordance with government noise policy or EIA significance. We will provide these noise contours at Deadline 4.
Ns.1.37	The Applicant	Cumulative noise effects from operational noise sources Paragraph 9.93 of the Planning Statement [APP-080] states:
		"The potential noise effects that have been assessed are as follows:
		[]
		 Noise from aircraft and airport operations including from aircraft in the air and noise from aircraft operations on the ground, associated Ground Support Equipment, airfield activities and airport buildings during operation of the Proposed Development;
		Changes in surface access noise, namely road traffic noise from vehicle movements associated with the operation of the Proposed Development; and
		Noise from the secondary business infrastructure located within the Northern Grass area."
		Figures 12.4-12.12 [APP-042] only provide noise contours for aircraft noise.
		Have noise contours been produced separately for operational road traffic and secondary business infrastructure? If not can they be provided?
		Applicant's Response:
		Operational road traffic noise contours have not been produced for road traffic noise. Paragraphs 12.7.73 to 12.7.77 and Table 12.30 of the ES [APP-034] present the assessment of indirect effects of road traffic noise. The assessment demonstrates that there will be a negligible increase in road noise on all roads where the development is expected to result

Ref No.	Respondent	Question
		in a change in road traffic volumes. Noise contours have been used for over 50 years to assess the impact of aircraft noise. Noise contours are less useful for ground base sources (other than for large geographical scale noise mapping). It is much more relevant to look at the noise impact at representative locations as has been done in the ES. A robust assessment of the effects of noise from road traffic has therefore been undertaken without a requirement for noise contours.
		Noise contours have not been produced for the secondary business infrastructure. As set out in paragraph 12.7.78 of the ES, noise impacts from the secondary business infrastructure has been assessed qualitatively because the precise layout, occupiers, activities and plant and equipment that will be operated in this area is unknown at this stage. Noise contours therefore cannot be provided for the secondary business infrastructure.
Ns.1.38	The Applicant	Significant permanent community operational aircraft noise effects [APP-034]
		Section 12.8 of the ES[APP-034] states:
		"Aircraft noise – permanent community effects – daytime
		Significant In the following communities, aircraft noise would increase to the point where there would be a perceived change in quality of life for occupants of buildings in these communities or a perceived change in the acoustic character of shared open spaces within these communities:
		Ramsgate;Pegwell Bay; andManston.
		Aircraft noise – permanent community effects – nighttime

Ref No.	Respondent	Question
		Significant In the following communities, aircraft noise would increase to the point where there would be a perceived change in quality of life for occupants of buildings in these communities or a perceived change in the acoustic character of shared open spaces within these communities:
		 Ramsgate; Manston; Wade; and West Stourmouth."
		Are the 115 properties expected to be exposed to noise levels above the daytime SOAEL of 63 dB LAeq,16hr; up to eight properties ¹⁴ expected to be exposed to noise levels above the daytime UAEL of 69 dB LAeq,16hr; and the 225 properties expected to be exposed to noise levels above the night time SOAEL of 55 dB LAeq,8hr included in the above permanent community effects daytime and night time?
		Applicant's Response: Yes. In respect of the footnote to this question, the Planning Statement is incorrect, the correct number is eight.

¹⁴ At paragraph 9.94 of the Planning Statement [APP-080] states there are ten properties?

2006 No. 2238

ENVIRONMENTAL PROTECTION, ENGLAND

The Environmental Noise (England) Regulations 2006

Made - - - - 8th August 2006
Laid before Parliament 7th September 2006
Coming into force - - 1st October 2006

The Secretary of State is a Minister designated(a) for the purposes of section 2(2) of the European Communities Act 1972(b) in relation to measures relating to the assessment, management and control of environmental noise. The Secretary of State makes these Regulations in exercise of the powers conferred by that section.

PART 1

GENERAL

Citation, commencement, extent and application

- 1.—(1) These Regulations may be cited as the Environmental Noise (England) Regulations 2006 and shall come into force on 1st October 2006.
 - (2) These Regulations apply in England.
- (3) Nothing in paragraph (2) means that strategic noise maps made or revised under these Regulations must be limited to England.
- (4) These Regulations apply to environmental noise to which humans are exposed in particular in built-up areas, in public parks or other quiet areas in an agglomeration, near schools, hospitals and other noise-sensitive buildings and areas.
- (5) These Regulations do not apply to noise that is caused by the exposed person himself, noise from domestic activities, noise created by neighbours, noise at work places or noise inside means of transport or due to military activities in military areas.

Interpretation

- **2.**—(1) Unless otherwise defined in these Regulations, words and terms used in these Regulations and in the Directive have the same meaning as in the Directive.
 - (2) In these Regulations—
 - "agglomeration" means an area identified as an agglomeration pursuant to regulation 3;
 - "airport operator" means the person for the time being having, in relation to a particular airport, the management of that airport;

⁽a) S.I. 2004/706.

⁽b) 1972 c.68.

- "calendar year" means a period of a year beginning on 1st January;
- "consolidated noise map" means a noise map compiled pursuant to regulation 14(2);
- "dB(A)" is a measure of sound pressure level ("A" weighted) in decibels as specified in British Standard BS EN 61672-2: 2003(a);
- "DEFRA" means the Department for Environment Food and Rural Affairs;
- "designated" when used in relation to any airport means designated under section 80 for the purposes of section 78 of the Civil Aviation Act 1982(b);
- "Directive" means Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise(c);
- "first round agglomeration" means an area identified as a first round agglomeration pursuant to regulation 3;
- "first round major railway" means a railway which is identified as a first round major railway pursuant to regulation 3;
- "first round major road" means a road which is identified as a first round major road pursuant to regulation 3;
- "in the form of regulations" means in the form of regulations made under section 2(2) of the European Communities Act 1972;
- " L_{day} " covers the period 07:00 19:00 hours in any 24 hour period;
- "Levening" covers the period 19:00 23:00 hours in any 24 hour period;
- "L_{night}" covers the period 23:00 07:00 hours in any 24 hour period;
- "major airport" means an airport identified as a major airport pursuant to regulation 3;
- "major railway" means a railway which is identified as a major railway pursuant to regulation 3;
- "major road" means a road which is identified as a major road pursuant to regulation 3;
- "motorway" means a special road which (save as otherwise provided by or under regulations made under section 17 of the Road Traffic Regulation Act 1984(**d**)) can be used by traffic only of Class I or II as specified in Schedule 4 to the Highways Act 1980(**e**);
- "non-designated" when used in relation to an airport means not designated under section 80 for the purposes of section 78 of the Civil Aviation Act 1982;
- "principal or classified road" means a road which is known as—
- (a) a principal road;
- (b) a classified road; or
- (c) both a principal road and a classified road,
- by virtue of section 12 of the Highways Act 1980 (whether by falling within subsection (1), or being classified under subsection (3));
- "quiet area in an agglomeration" means an area which is identified as a quiet area in an agglomeration in accordance with regulation 13;
- "special road" has the same meaning as in section 329(1) of the Highways Act 1980;
- "supplementary noise indicator" has the meaning given in regulation 4(6); and
- "trunk road" means any highway for which the Secretary of State is the relevant highway authority.

⁽a) ISBN 0-580-42224-0.

⁽b) 1982 c.16.

⁽c) O.J. No. L 189, 18.07.2002, p. 12.

⁽d) 1984 c.27; section 17 was amended by the New Roads and Street Works Act 1991 (c.22), Schedule 8, paragraph 28 and Schedule 9, and by the Road Traffic Act 1991 (c.40), Schedule 7, paragraph 3 and Schedule 8.

⁽e) Schedule 4 has been amended by the Road Traffic (Consequential Provisions) Act 1988 (c.54), Schedule 3, paragraph 21(3).

Identification of noise sources

- **3.**—(1) No later than 31st December 2006 the Secretary of State must, in the form of regulations, identify all—
 - (a) first round agglomerations;
 - (b) first round major roads;
 - (c) first round major railways; and
 - (d) major airports.
- (2) No later than 31st December 2011 the Secretary of State must, in the form of regulations, identify all—
 - (a) agglomerations;
 - (b) major roads;
 - (c) major railways; and
 - (d) major airports.
 - (3) In any relevant year the Secretary of State must, in the form of regulations, identify—
 - (a) agglomerations;
 - (b) major roads;
 - (c) major railways; or
 - (d) major airports,

as necessary if he considers that the most recent regulations produced pursuant to paragraph (2) are no longer appropriate.

- (4) In paragraph (3) "relevant year" means 2016 and every fifth year thereafter.
- (5) When discharging his duty under paragraph (1)(a) to identify first round agglomerations the Secretary of State must identify areas—
 - (a) having a population in excess of 250,000 persons and a population density equal to or greater than 500 people per km²; and
 - (b) which he considers to be urbanised.
- (6) When discharging his duty under paragraph (2)(a) or (3)(a) to identify agglomerations the Secretary of State must identify areas—
 - (a) having a population in excess of 100,000 persons and a population density equal to or greater than 500 people per km²; and
 - (b) which he considers to be urbanised.
- (7) When discharging his duty under paragraph (1)(b) to identify first round major roads the Secretary of State must identify roads which—
 - (a) are—
 - (i) trunk roads,
 - (ii) motorways that are not trunk roads, or
 - (iii) principal or classified roads;
 - (b) have more than six million vehicle passages a year; and
 - (c) he considers to be regional, national or international.
- (8) When discharging his duty under paragraph (2)(b) or (3)(b) to identify major roads the Secretary of State must identify roads which—
 - (a) are—
 - (i) trunk roads,
 - (ii) motorways that are not trunk roads, or
 - (iii) principal or classified roads;

- (b) have more than three million vehicle passages a year; and
- (c) he considers to be regional, national or international.
- (9) When discharging his duty under paragraph (1)(c) to identify first round major railways the Secretary of State must identify railways which have more than 60,000 train passages per year.
- (10) When discharging his duty under paragraph (2)(c) or (3)(c) to identify major railways the Secretary of State must identify railways which have more than 30,000 train passages per year.
- (11) When discharging his duty under paragraph (1)(d), (2)(d) or (3)(d) to identify major airports the Secretary of State must identify civil airports which have more than 50,000 movements per year (a movement being a take-off or a landing), excluding those purely for training purposes on light aircraft.

PART 2

STRATEGIC NOISE MAPS

CHAPTER 1

GENERAL REQUIREMENTS FOR STRATEGIC NOISE MAPS

Strategic noise maps: general requirements

- **4.**—(1) Any strategic noise map made or revised under this Part must satisfy the applicable requirements in Schedule 1.
 - (2) A competent authority under regulation 6 or 10 must apply—
 - (a) the noise indicators L_{den} and L_{night} as referred to in Annex I of the Directive; and
 - (b) the supplementary noise indicators in all cases listed as examples in paragraph 3 of Annex I of the Directive,

when making or revising strategic noise maps under this Part.

- (3) The values of L_{den} , L_{night} and the supplementary noise indicators must be determined by means of the assessment methods set out in Schedule 2.
- (4) Subject to paragraph (5) existing noise indicators and related data may be converted into L_{den} and L_{night} .
 - (5) The data referred to in paragraph (4) must not be more than three years old.
 - (6) "Supplementary noise indicator" means a noise indicator as defined in Schedule 3.

CHAPTER 2

STRATEGIC NOISE MAPS – NOISE SOURCES OTHER THAN NON-DESIGNATED AIRPORTS

Application

5. This Chapter does not apply to noise from non-designated airports.

Competent Authority

6. The competent authority for this Chapter is the Secretary of State.

Duty to make, review and revise strategic noise maps

- 7.—(1) No later than 30th June 2007 the competent authority must make and, in accordance with regulation 23, adopt strategic noise maps showing the situation in the preceding calendar year for all—
 - (a) first round agglomerations;
 - (b) first round major roads;
 - (c) first round major railways; and
 - (d) major airports.
- (2) No later than 30th June 2012, and thereafter every five years, the competent authority must make and, in accordance with regulation 23, adopt strategic noise maps showing the situation in the preceding calendar year for all—
 - (a) agglomerations;
 - (b) major roads;
 - (c) major railways; and
 - (d) major airports.
- (3) From time to time, and whenever a major development occurs affecting the existing noise situation, the competent authority must—
 - (a) review; and
 - (b) if necessary revise,

any strategic noise map made pursuant to paragraphs (1) or (2) and adopted pursuant to regulation 23.

CHAPTER 3

STRATEGIC NOISE MAPS - NON-DESIGNATED AIRPORTS

Application

8. This Chapter applies to noise from non-designated airports.

Interpretation

9.—(1) In this Chapter—

"input data" means all the data and related information used to produce the numerical data in electronic form required by paragraph 3(2)(b) or 4(2)(b) (as appropriate) of Schedule 1;

"metadata" means such elements of Section 2 of the "SPIRE Data Standard, Version 1.0" (DEFRA, 25th November 2004)(a) as are required to describe the—

- (a) input data; and
- (b) information and data required by paragraph 3(2) or 4(2) (as appropriate) of Schedule 1.
- (2) Any requirement in this Chapter to submit input data to a competent authority is a requirement to submit that input data in a format that—
 - (a) is electronic;
 - (b) allows electronic manipulation; and
 - (c) does not require manipulation in order to reproduce the numerical data in electronic form required by paragraph 3(2)(b) or 4(2)(b) (as appropriate) of Schedule 1.

⁽a) SPIRE Programme, Product Reference: SIP - DP - 011.

Competent Authority

10. The competent authority for this Chapter is the airport operator.

Duty to make, review and revise strategic noise maps: non-designated major airports

- 11.—(1) This regulation applies to non-designated major airports.
- (2) No later than 31st March 2007, and thereafter every five years, the competent authority must—
 - (a) make a strategic noise map showing the situation in the preceding calendar year for the airport; and
 - (b) submit that map with input data and metadata to the Secretary of State.
- (3) From time to time, and whenever a major development occurs affecting the existing noise situation, the competent authority must—
 - (a) review; and
 - (b) if necessary revise,

any strategic noise map made pursuant to paragraph (2) and adopted pursuant to regulation 23.

(4) The competent authority must submit any strategic noise map revised pursuant to paragraph (3)(b), with input data and metadata, to the Secretary of State within three working days of its revision.

Duty to make, review and revise strategic noise maps: non-designated other airports

- **12.**—(1) This regulation applies to non-designated other airports.
- (2) No later than 31st March 2007 the competent authority must—
 - (a) make a strategic noise map showing the situation in the preceding calendar year for any relevant first round agglomeration; and
 - (b) submit that map with input data and metadata to the Secretary of State.
- (3) No later than 31st March 2012, and thereafter every five years, the competent authority must—
 - (a) make a strategic noise map showing the situation in the preceding calendar year for any relevant agglomeration; and
 - (b) submit that map with input data and metadata to the Secretary of State.
- (4) From time to time, and whenever a major development occurs affecting the existing noise situation, the competent authority must—
 - (a) review; and
 - (b) if necessary revise,

any strategic noise map made pursuant to paragraphs (2) or (3) and adopted pursuant to regulation 23.

- (5) The competent authority must submit any strategic noise map revised pursuant to paragraph (4)(b), with input data and metadata, to the Secretary of State within three working days of its revision.
 - (6) In this regulation—

"relevant first round agglomeration" means a first round agglomeration in which air traffic from the airport results in air traffic noise of—

- (a) an L_{den} value of 55 dB(A) or greater; or
- (b) an L_{night} value of 50 dB(A) or greater,

anywhere within the first round agglomeration;

"relevant agglomeration" means an agglomeration in which air traffic from the airport results in air traffic noise of—

- (a) an L_{den} value of 55 dB(A) or greater; or
- (b) an L_{night} value of 50 dB(A) or greater, anywhere within the agglomeration.

PART 3

QUIET AREAS

Identification of quiet areas

- **13.**—(1) No later than—
 - (a) 30th September 2007 for first round agglomerations; and
 - (b) 30th September 2012 for agglomerations,

the Secretary of State must, in the form of regulations, identify quiet areas in those agglomerations.

- (2) Paragraph (3) applies if the Secretary of State considers that the most recent regulations produced pursuant to this regulation are no longer appropriate.
- (3) No later than 30th September in any relevant year the Secretary of State must, if he considers it necessary, in the form of regulations identify quiet areas in agglomerations.
 - (4) In paragraph (3) "relevant year" means 2017 and every fifth year thereafter.

PART 4

ACTION PLANS

CHAPTER 1

GENERAL

Duty to publish criteria or limit values and a consolidated noise map

- **14.**—(1) No later than 18th July 2007 the Secretary of State must publish guidance setting out limit values or other criteria for the identification of priorities for action plans.
- (2) No later than 1st October 2007 the Secretary of State must compile and publish a consolidated noise map from all strategic noise maps that are made or revised pursuant to regulation 7, 11 or 12 and adopted pursuant to regulation 23.

Action plans: general requirements

- 15.—(1) Any action plan drawn up or revised under this Part must—
 - (a) meet the objectives of Article 1(c) of the Directive;
 - (b) be designed to manage noise issues and effects, including noise reduction if necessary;
 - (c) aim to protect quiet areas in first round agglomerations and agglomerations against an increase in noise:
 - (d) address priorities which must be identified by having regard to guidance published pursuant to regulation 14(1);
 - (e) apply in particular to the most important areas as established by strategic noise maps adopted pursuant to regulation 23; and

- (f) meet the requirements in Schedule 4.
- (2) Paragraph (3) applies to—
 - (a) any action plan; and
 - (b) any revision of an action plan,

drawn up under this Part for a first round agglomeration or an agglomeration.

- (3) An action plan and any revision of an action plan must be based upon and apply in particular to the most important areas as established by—
 - (a) all strategic noise maps that—
 - (i) are made or revised pursuant to regulation 7, 11 or 12 and adopted pursuant to regulation 23, and
 - (ii) concern any part of the area addressed by the action plan; and
 - (b) a consolidated noise map to the extent that it concerns any part of the area addressed by the action plan.

CHAPTER 2

ACTION PLANS - NOISE SOURCES OTHER THAN AIRPORTS

Competent Authority

16. The competent authority for this Chapter is the Secretary of State.

Duty to draw up, review and revise action plans

- 17.—(1) No later than 18th July 2008 the competent authority must draw up action plans for—
 - (a) places near first round major roads;
 - (b) places near first round major railways; and
 - (c) first round agglomerations.
- (2) No later than 18th July 2013 the competent authority must draw up action plans for—
 - (a) places near major roads;
 - (b) places near major railways; and
 - (c) agglomerations.
- (3) Paragraph (4) applies—
 - (a) whenever a major development occurs affecting the existing noise situation; and
 - (b) at least every five years after the date on which an action plan is adopted pursuant to regulation 24.
- (4) The competent authority must—
 - (a) review; and
 - (b) if necessary revise,

the action plan.

CHAPTER 3

ACTION PLANS - AIRPORTS

Competent authority

- 18. This Chapter applies to—
 - (a) major airports; and

(b) non-designated other airports if aircraft noise results in an L_{den} value of 55 dB(A) or greater or an L_{night} value of 50 dB(A) or greater anywhere in first round agglomerations or agglomerations,

and the competent authority is the airport operator.

Duty to draw up, review and revise action plans

- 19.—(1) No later than 30th April 2008 the competent authority must—
 - (a) draw up an action plan for places near the airport; and
 - (b) submit that action plan to the Secretary of State.
- (2) Paragraph (3) only applies if the competent authority was not required to draw up an action plan for the airport pursuant to paragraph (1) because it was not the competent authority on or before 30th April 2008.
 - (3) No later than 30th April 2013 the competent authority must—
 - (a) draw up an action plan for places near the airport; and
 - (b) submit that action plan to the Secretary of State.
 - (4) Paragraph (5) applies—
 - (a) whenever a major development occurs affecting the existing noise situation; and
 - (b) at least every five years after the date on which an action plan is adopted pursuant to regulation 24.
 - (5) The competent authority must—
 - (a) review; and
 - (b) if necessary revise,

the action plan.

(6) An action plan revised pursuant to paragraph (5)(b) must be submitted to the Secretary of State within three working days of its revision.

CHAPTER 4

ACTION PLANS - PUBLIC PARTICIPATION

Public participation

- **20.**—(1) In preparing and revising action plans the competent authorities under regulations 16 and 18 must ensure that—
 - (a) the public is consulted about proposals for action plans;
 - (b) the public is given early and effective opportunities to participate in the preparation and review of the action plans;
 - (c) the results of that public participation are taken into account;
 - (d) the public is informed of the decisions taken; and
 - (e) reasonable time frames are provided allowing sufficient time for each stage of public participation.

CHAPTER 5

IMPLEMENTATION OF ACTION PLANS

Implementation of action plans

21.—(1) Where an action plan or a revision of an action plan—

- (a) has been adopted pursuant to regulation 24; and
- (b) identifies a public authority as responsible for a particular action, that public authority must treat the action plan as its policy insofar as it relates to that action.
 - (2) A public authority may depart from any policy mentioned in paragraph (1) if—
 - (a) it provides—
 - (i) the Secretary of State, and
 - (ii) the competent authority responsible for the preparation of the action plan or the revision (if not the Secretary of State),

with written reasons for departing from that policy; and

- (b) it publishes those reasons.
- (3) In this regulation "public authority" includes any person who exercises functions of a public nature, but does not include—
 - (a) either House of Parliament or a person exercising functions in connection with proceedings in Parliament;
 - (b) courts or tribunals; or
 - (c) the Secretary of State.

PART 5

COOPERATION WITH EXTERNAL COMPETENT AUTHORITIES

Cooperation with external competent authorities

- **22.**—(1) When necessary in order to meet its obligations under these Regulations, a competent authority must use all reasonable endeavours to secure the cooperation of an external competent authority.
 - (2) A competent authority—
 - (a) when requested to do so by an external competent authority; and
 - (b) if necessary to meet that external competent authority's obligations arising under the Directive,

must cooperate with that external competent authority.

(3) In this Part "external competent authority" means a competent authority in Northern Ireland, Scotland or Wales designated for the purposes of Article 4 of the Directive.

PART 6

ADOPTION OF STRATEGIC NOISE MAPS AND ACTION PLANS

Adoption of strategic noise maps

- 23.—(1) If the Secretary of State considers that a strategic noise map—
 - (a) submitted to him pursuant to regulation 11 or 12;
 - (b) submitted to him pursuant to paragraph (4); or
 - (c) made or revised by him,

meets the requirements of regulation 4, he must adopt the map.

(2) If the Secretary of State considers that a strategic noise map submitted to him pursuant to regulation 11 or 12 or paragraph (4) does not meet the requirements of regulation 4 he may—

- (a) amend and adopt the map; or
- (b) reject the map.
- (3) If a strategic noise map is rejected pursuant to paragraph (2)(b) the Secretary of State must notify the competent authority that submitted it of—
 - (a) the reasons why the map was not adopted; and
 - (b) the date by which the map must be revised and resubmitted.
- (4) The recipient of a notification under paragraph (3) must submit the revised strategic noise map to the Secretary of State by the date specified in the notification.
- (5) Paragraphs (1) to (4) apply to a revised strategic noise map as they apply to a strategic noise map submitted pursuant to regulation 11 or 12.
 - (6) If the Secretary of State amends—
 - (a) a strategic noise map; or
 - (b) a revised strategic noise map,

he must take such steps as he considers appropriate for ensuring that the map complies with the requirements of regulation 4.

Adoption of action plans

- 24.—(1) If the Secretary of State considers that an action plan—
 - (a) submitted to him pursuant to regulation 19(1)(b), 19(3)(b) or 19(6);
 - (b) submitted to him pursuant to paragraph (5); or
 - (c) drawn up or revised by him,

meets the requirements of regulation 15, he may adopt the action plan.

- (2) Paragraph (3) applies if—
 - (a) the Secretary of State considers that an action plan submitted to him pursuant to regulation 19(1)(b), 19(3)(b) or 19(6) does not meet the requirements of regulation 15; or
 - (b) an action plan is not adopted pursuant to paragraph (1).
- (3) Where this paragraph applies the Secretary of State must—
 - (a) amend and adopt the plan; or
 - (b) reject the plan.
- (4) If an action plan is rejected pursuant to paragraph (3)(b) the Secretary of State must notify the competent authority that submitted it of—
 - (a) the reasons why the plan was not adopted; and
 - (b) the date by which the plan must be revised and resubmitted.
- (5) The recipient of a notification under paragraph (4) must submit the revised action plan to the Secretary of State by the date specified in the notification.
- (6) Paragraphs (1) to (5) apply to a revised action plan as they apply to an action plan submitted pursuant to regulation 19(1)(b), 19(3)(b) or 19(6).
 - (7) If the Secretary of State amends—
 - (a) an action plan; or
 - (b) a revised action plan,

he must take such steps as he considers appropriate for ensuring that the action plan complies with the requirements of these Regulations.

PART 7

POWERS OF THE SECRETARY OF STATE IN RELATION TO THE FUNCTIONS OF OTHER COMPETENT AUTHORITIES

Application

25. This Part does not apply to any functions under these Regulations for which the Secretary of State is the competent authority.

Powers

- **26.**—(1) The Secretary of State may at any time require a competent authority to provide information in relation to its functions under these Regulations.
 - (2) A request for information pursuant to paragraph (1)—
 - (a) must be made in writing;
 - (b) may specify the format in which information must be provided; and
 - (c) may specify the period of time within which a response must be received.
 - (3) If an authority receives a request pursuant to paragraph (1) it must respond—
 - (a) within the time period specified pursuant to paragraph (2)(c); or
 - (b) if no such period is specified, within fourteen days of receipt of the request.
 - (4) Paragraph (5) applies where—
 - (a) the Secretary of State has consulted the competent authority; and
 - (b) he considers that by reason of any act or omission, or any likely act or omission, by the competent authority—
 - (i) a requirement of these Regulations; or
 - (ii) a requirement imposed on the United Kingdom by the Directive, is unlikely to be met.
- (5) The Secretary of State may exercise such of the functions of the competent authority as he considers appropriate.

Recovery of expenses

- 27. Where the Secretary of State incurs expenses pursuant to—
 - (a) regulation 23(2);
 - (b) regulation 24(3); or
 - (c) regulation 26(5),

he may recover those expenses from the relevant competent authority as a civil debt.

Relevant competent authority

- **28.** In regulation 27 "relevant competent authority" means—
 - (a) in relation to regulation 23(2), the competent authority that submitted the strategic noise map pursuant to regulation 11 or 12;
 - (b) in relation to regulation 24(3), the competent authority that submitted the action plan pursuant to regulation 19; and
 - (c) in relation to regulation 26(5), the competent authority whose functions the Secretary of State exercises pursuant to that regulation.

PART 8

INFORMATION TO THE PUBLIC AND GUIDANCE

Availability of strategic noise maps, consolidated noise map and action plans

29.—(1) Any—

- (a) strategic noise map that is made available to the public before it is adopted pursuant to regulation 23; or
- (b) action plan that is made available to the public before it is adopted pursuant to regulation 24,

must include prominently displayed wording identifying it as a draft subject to adoption by the Secretary of State.

- (2) Any—
 - (a) strategic noise map adopted pursuant to regulation 23;
 - (b) consolidated noise map compiled pursuant to regulation 14(2);or
 - (c) action plan adopted pursuant to regulation 24,

must be published by the Secretary of State and accompanied by a summary setting out the most important points.

Guidance

30. A competent authority, in exercising any of its functions under these Regulations, must have regard to any guidance issued by the Secretary of State under this regulation.

Ben Bradshaw
Parliamentary Under Secretary of State
Department for Environment Food and Rural Affairs

8th August 2006

SCHEDULE 1

regulations 4 and 9

MINIMUM REQUIREMENTS FOR STRATEGIC NOISE MAPPING

Interpretation

1. In this Schedule—

"editable" means in a format that allows (without the need for manipulation) the electronic production of—

- (a) numerical data in tables, and
- (b) graphical plots,

to display the information described in paragraphs 1.5, 1.6, 1.7, 2.5, 2.6 and 2.7 of Annex VI of the Directive;

- "grid" means a grid of vector points which are—
- (c) at 10 metre by 10 metre intervals,
- (d) spatially referenced to the British National Grid reference system used by the Ordnance Survey as a pair of integers to show Eastings then Northings in metres from the origin, and
- (e) aligned with the 10 metre vertices of the British National Grid reference system used by the Ordnance Survey so that references finish with the number zero.

General requirements for strategic noise maps

- 2.—(1) Strategic noise maps and their revisions must—
 - (a) satisfy the minimum requirements laid down in Annex IV of the Directive; and
 - (b) be clear and comprehensible.
- (2) In applying paragraph (1)(a) any reference in Annex IV of the Directive to—
 - (a) Article 8 of the Directive shall be taken to be a reference to regulations 15, 17 and 19 of these Regulations;
 - (b) Article 9 of the Directive shall be taken to be a reference to regulation 29 of these Regulations.

Requirements for strategic noise maps for agglomerations

- **3.**—(1) This paragraph applies only to—
 - (a) a strategic noise map made under regulation 7(1)(a), 7(2)(a), 12(1) or 12(3); or
 - (b) a revision of such a strategic noise map.
- (2) Strategic noise maps must—
 - (a) include the information (in electronic format) described in paragraphs 1.1 to 1.4 inclusive of Annex VI of the Directive; and
 - (b) include editable numerical data in electronic form containing the values of L_{den} , L_{night} and the supplementary noise indicators on a grid.

Requirements for strategic noise maps for major roads, major railways and major airports

- **4.**—(1) This paragraph applies only to—
 - (a) any strategic noise map made under—
 - (i) regulation 7(1)(b) to (d),
 - (ii) regulation 7(2)(b) to (d),
 - (iii) regulation 11(2); or
 - (b) any revision of such a map.
- (2) Strategic noise maps must—
 - (a) include the information (in electronic format) described in paragraphs 2.1 to 2.4 inclusive of Annex VI of the Directive; and
 - (b) include editable numerical data in electronic form containing the values of L_{den} , L_{night} and the supplementary noise indicators on a grid.

ASSESSMENT METHODS FOR THE NOISE INDICATORS

Introduction

- 1.—(1) The values of L_{den} , L_{night} and the supplementary noise indicators must be determined by computation (at the assessment position).
 - (2) In this Schedule—

"assessment position" means the assessment height in paragraph 7 of Annex IV of the Directive:

"Recommendation" means Commission Recommendation 2003/613/EC of 6 August 2003 concerning the guidelines on the revised interim computation methods for industrial noise, aircraft noise, road traffic noise and railway noise, and related emissions data(a).

Assessment method for road traffic noise indicators

2. For road traffic noise indicators the assessment method "Calculation of road traffic noise" (Department of Transport, 7th June 1988, HMSO)(**b**) must be used, adapted using the report "Method for converting the UK road traffic noise index $LA_{10,18h}$ to the EU noise indices for road noise mapping" (DEFRA, 24th January 2006)(**c**).

Assessment method for railway noise indicators

- **3.** For railway noise indicators the assessment methods—
 - (a) "Calculation of railway noise" (Department of Transport, 13th July 1995, HMSO)(d); and
 - (b) (in relation to railways to which it is expressed to apply) "Calculation of railway noise 1995 Supplement No. 1 Procedure for the calculation of noise from Eurostar trains class 373" (Department for Transport, 20th October 1996, Stationery Office)(e),

must be used, adapted as shown in Figure 6.5 of the report "Rail and wheel roughness – implications for noise mapping based on the Calculation of Railway Noise procedure" (DEFRA, March 2004)(f).

Assessment methods for aircraft noise indicators

4. For aircraft noise indicators the assessment method "Report on Standard Method of Computing Noise Contours around Civil Airports" (Second Edition, European Civil Aviation Conference, 2–3 July 1997)(**g**) must be used in accordance with paragraph 2.4 of the Annex in the Recommendation.

Assessment methods for industrial noise indicators and port noise indicators

5.—(1) For industrial noise indicators and port noise indicators the propagation assessment method described in "ISO 9613-2:1996 Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation" (International Standards Organisation, 1996)(**h**) must be used in accordance with paragraph 2.5 of the Annex in the Recommendation.

- (a) O.J. No. L 212, 22.8.2003, p. 49.
- (b) ISBN 0115508473.
- (c) Prepared by TRL Limited and Casella Stanger, Document Reference st/05/91/AGG04442.
- (d) ISBN 0115517545.
- (e) ISBN 0115518738.
- (f) Prepared by AEA Technology plc, Document Reference: AEATR-PC&E-2003-002.
- (g) Adopted by the Twenty-First Plenary Session of ECAC, Document Reference: ECAC.CEAC Doc. 29.
- (h) International Organisation for Standardization (http://www.iso.ch)

- (2) Suitable noise emission data (input data) for "ISO 9613-2:1996 Acoustics Attenuation of sound during propagation outdoors Part 2: General method of calculation" can be obtained either from measurements carried out in accordance with one of the following methods:
 - (a) "Acoustics. Determination of sound power levels of multisource industrial plants for evaluation of sound pressure levels in the environment. Engineering method" (BS ISO 8297:1994, British Standards Institute)(a);
 - (b) "Acoustics. Determination of sound power levels of noise sources using sound pressure. Engineering method in an essentially free field over a reflecting plane" (BS EN ISO 3744:1995, British Standards Institute)(b);
 - (c) "Acoustics. Determination of sound power levels of noise sources using sound pressure. Survey method using an enveloping measurement surface over a reflecting plane" (BS EN ISO 3746:1996, British Standards Institute)(c),

or by using Toolkit 10 of the "Good Practice Guide for Strategic Noise Mapping and the Production of Associated Data on Noise Exposure Version 2, Position Paper Final Draft" (European Commission Working Group Assessment of Exposure to Noise, 13 January 2006)(d).

SCHEDULE 3

regulation 4

SUPPLEMENTARY NOISE INDICATORS

Interpretation

- 1. In this Schedule—
 - " $L_{A10,18h}$ " is the arithmetic mean noise level in dB(A) exceeded for 10% of each hour over the period 06:00 24:00 hours;
 - " $L_{Aeq,16h}$ " is the equivalent continuous sound level in dB(A) that, over the period 07:00 23:00 hours, contains the same sound energy as the actual fluctuating sound that occurred in that period;
 - " $L_{Aeq,18h}$ " is the equivalent continuous sound level in dB(A) that, over the period 06:00 24:00 hours, contains the same sound energy as the actual fluctuating sound that occurred in that period;
 - " $L_{Aeq,6h}$ " is the equivalent continuous sound level in dB(A) that, over the period 24:00 06:00 hours, contains the same sound energy as the actual fluctuating sound that occurred in that period.

Road Traffic Noise

- 2. The supplementary noise indicators in relation to road traffic noise are—
 - (a) $L_{A10,18h}$;
 - (b) $L_{\text{Aeq.16h}}$;
 - (c) L_{day}; and
 - (d) Levening.

⁽a) British Standards Institute (http://www.standardsdirect.org/standards/standards/StandardsCatalogue24_view_23347.html)

⁽b) British Standards Institute (http://www.standardsdirect.org/standards/standards2/StandardsCatalogue24_view_19606.html)

⁽c) British Standards Institute (http://www.standardsdirect.org/standards/standards2/StandardsCatalogue24 view 19608.html)

⁽d) European Commission Working Group Assessment of Exposure to Noise (http://www.defra.gov.uk/environment/noise/mapping/exposure/pdf/exposuredata-guide.pdf)

Railway Noise

- 3. The supplementary noise indicators in relation to railway noise are—
 - (a) $L_{Aeq,16h}$;
 - (b) $L_{Aeq,18h}$;
 - (c) $L_{Aeq,6h}$;
 - (d) L_{day}; and
 - (e) Levening.

Aircraft Noise

- **4.** The supplementary noise indicators in relation to aircraft noise are—
 - (a) $L_{Aeq,16h}$;
 - (b) L_{day}; and
 - (c) Levening.

Industrial Noise and Port Noise

- 5. The supplementary noise indicators in relation to industrial noise and port noise are—
 - (a) $L_{Aeq,16h}$;
 - (b) L_{day}; and
 - (c) L_{evening}.

SCHEDULE 4

regulation 15

MINIMUM REQUIREMENTS FOR ACTION PLANS

General

- 1.—(1) An action plan must—
 - (a) meet the minimum requirements of Annex V of the Directive; and
 - (b) contain a summary covering all the important aspects referred to in Annex V of the Directive, not exceeding ten pages in length.
- (2) In applying paragraph (1) any reference in Annex V of the Directive to—
 - (a) Article 5 of the Directive shall be taken to be a reference to regulation 4 of these Regulations;
 - (b) Article 8(7) of the Directive shall be taken to be a reference to regulation 20 of these Regulations.

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations implement Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise (O.J. No. L 189, 18.07.2002, p. 12) (the 'Directive').

Strategic noise maps

The making of strategic noise maps will occur in two rounds, the first in 2007 and the second in 2012. In the second round a larger number of the same type of noise sources will have to be mapped than in the first round. Subsequently strategic noise maps will have to be made every five years.

Regulation 3 requires the Secretary of State to identify the noise sources for which strategic noise maps must be made. Regulation 7 requires the Secretary of State to make strategic noise maps for agglomerations, major roads, major railways and major airports designated under section 80 for the purposes of section 78 of the Civil Aviation Act 1982 (1982 c.16). From time to time, and whenever a major development occurs, the Secretary of State must review (and if necessary, revise) strategic noise maps.

Regulations 11 and 12 require airport operators to make strategic noise maps for airports that are not designated under the Civil Aviation Act 1982. Strategic noise maps will need to be made for: (i) all non-designated major airports; and (ii) noise in agglomerations arising from any other airports (if aircraft noise results in a value of 55 L_{den} or 50 L_{night} anywhere in those agglomerations). Strategic noise maps will need to be reviewed (and revised if necessary) from time to time, and whenever a major development occurs. Once made, the airport operators must submit strategic noise maps (or their revisions) to the Secretary of State for adoption.

All strategic noise maps must meet the requirements set out in regulation 4.

Regulation 4 and Schedule 3 specify which noise indicators and supplementary noise indicators must be used in making the strategic noise maps. Schedule 2 sets out the assessment methods to be used in calculating the values of noise indicators. Different methods are specified for each noise source.

Regulation 13 requires the Secretary of State to identify quiet areas in first round agglomerations and in agglomerations.

Action plans

Action plans must be drawn up in 2008 and in 2013. This is consequential on the dates by which strategic noise maps must be prepared..

Regulation 14 requires the Secretary of State to publish guidance on how the priorities in action plans should be identified. It also requires the Secretary of State to compile and publish a consolidated noise map.

Regulation 15 sets out the requirements for action plans.

Regulation 17 requires the Secretary of State to draw up action plans for places near to major roads and major railways, and for first round agglomerations and agglomerations. The Secretary of State must review (and revise, if necessary) the action plans every five years or sooner if a major development occurs.

Regulation 19 requires airport operators to draw up action plans in relation to major airports and other airports (if aircraft noise results in a value of 55 L_{den} or 50 L_{night} anywhere in those agglomerations). The airport operator must review (and revise, if necessary) the action plans every five years or sooner if a major development occurs. Once drawn up or revised, the airport operators must submit an action plan to the Secretary of State for adoption.

Regulation 20 specifies the public participation required during the preparation and revision of action plans.

Regulation 21 requires public authorities to treat action plans as policy insofar as the action plan identifies them as being responsible for a particular action. Public authorities may depart from such policies in specified circumstances.

Other provisions

Regulation 22 requires competent authorities in England to cooperate with their counterparts in Northern Ireland, Scotland and Wales when necessary to do so in order to meet obligations under these Regulations or the Directive.

Regulations 23 and 24 set out the mechanism by which the Secretary of State adopts strategic noise maps and action plans respectively.

Regulation 26 provides the Secretary of State with the power to require competent authorities to provide information in relation to their obligations under the Regulations or to step in and carry out the functions of competent authorities under specified circumstances.

Regulation 27 gives the Secretary of State power to reclaim certain expenses from competent authorities.

Regulation 29 sets out requirements for the publication of strategic noise maps, a consolidated noise map and action plans prepared by airport operators and approved by the Secretary of State.

Regulation 30 requires competent authorities to have regard to any guidance published by the Secretary of State.

A Regulatory Impact Assessment has been prepared and placed in the libraries of both Houses of Parliament. It is available on http://www.defra.gov.uk/environment/noise/ambient.htm. A transposition note has been prepared and is available on http://www.defra.gov.uk/environment/noise/ambient.htm.

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Business Intelligence Statistical Bulletin

July 2018

2017 Mid-Year Population Estimates: Total population of Kent authorities

Related information

The <u>Population and Census</u> web page contains more information which you may find useful.

Population change presents a time-series of population estimates and an analysis of population growth

Population forecasts presents the latest thinking about future population levels

2011 Census provides information of the characteristics of the population

NOTE: within this bulletin 'Kent' refers to the Kent County Council (KCC) area which excludes Medway

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This bulletin presents the 2017 Mid-Year Population Estimates (Census based) as published by the Office for National Statistics on 28 June 2018. Population change between 2016 and 2017 is also presented.

Summary of findings

- Kent's population grew by +14,200 people (+0.92%) between 2016 and 2017. This rate of growth is higher than both the national and regional growth rate of +0.64% and +0.56% respectively.
- This annual rate of population growth is lower than the previous year when Kent's population grew by 17,300 people (+1.1%) between 2015 and 2016
- Kent remains the largest non-metropolitan local authority area in England with a resident population of 1,554,600 people in mid-2017.
- There are 4.4 people per hectare in Kent, making Kent less densely populated than the regional average (4.8) but slightly higher than the national average (4.3).
- Maidstone has the largest population of all Kent districts with a population of 167,700 in mid-2017 whilst Gravesham has the smallest population with 106,100 people.
- Dartford is Kent's most densely populated district with 14.8 people per hectare and Ashford is the least densely populated district (2.2 persons per hectare).
- Dartford saw the largest population increase both in absolute and percentage terms, increasing by an additional 2,400 people (+2.3%) between 2016 and 2017.



Summary of findings continued

- All the Government Regions experienced an increase in population between 2016 and 2017. London experienced the largest growth in absolute terms (+55,300 people equivalent to +0.63%). The South East saw the second highest increase (+50,500 people, equivalent to +0.56% increase).
- The East Midlands experienced the largest growth in percentage terms with a rise of +0.98% which is equivalent to +46,300 people.
- Of the counties in the South East region, Kent experienced the highest increase in population in absolute terms between 2016 and 2017 (+14,200 people, equivalent to +0.92%).

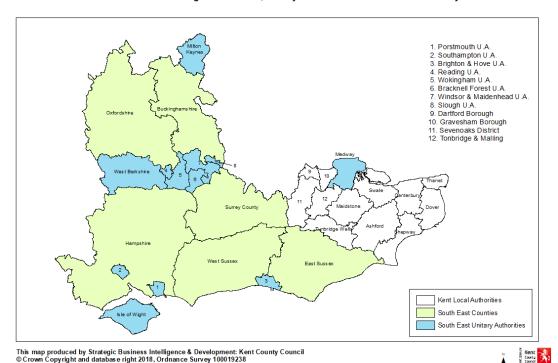
This bulletin presents the national population estimate with the population of each of the former Government office regions in England. It then focuses specifically on the South East region and compares Kent's population alongside other counties within the South East region. It ends by looking at the total population of each of the Kent local authority districts

Only total population estimates are presented here but further details from the 2017 estimates are available on the Kent County Council website in the bulletins and excel toolkits listed below:

- '2017 Mid-Year Population Estimates: Age and gender profile'
 presents the age and gender profile of each local authority district in
 Kent in the form of tables and population pyramids.
- 'Time series of Mid-year population estimates 1997-2017' presents total population between 1996 and 2017.
- 'What's causing Kent's population growth?' examines the reasons behind the changes in population.
- 'Interactive population estimates Excel toolkit' allows access to population estimates for any chosen age group for all 12 Kent local authority districts and Kent County as a whole, between 1992 and 2017.

It is ONS policy to present all estimates rounded to the nearest hundred. Within this bulletin all numbers have been individually rounded and therefore may not sum. Percentages have been calculated using unrounded numbers. The data in this bulletin will be updated in summer 2019 when the 2018 mid-year population estimates will be released.

Geographical reference map



Former Government Office Region - Counties, Unitary Authorities and Kent Local Authority Districts

Total population of England and each of the former Government Office Regions

The 2017 mid-year population estimate for England is 55,619,400. This is +351,400 people (+0.64%) higher than the 2016 mid-year population estimate.

The South East has the largest population with 9,080,800 people. The region with the smallest population is the North East with 2,644,700 people.

The London region saw the largest increase in population between 2016 and 2017 growing by +55,300 people (+0.63%). This increase brought the population of London to over 8.8 million. The South East has shown the second largest population growth, increasing by an additional +50,500 people (+0.56%) between 2016 and 2017.

The East Midlands saw the largest percentage increase with a rise of +0.98% which is equivalent to an increase of +46,300 people. The South West experienced the second largest growth in percentage terms with a +0.77% increase, equivalent to an extra 42,300 people between 2016 and 2017.

London is the most densely populated region with 56.1 people per hectare and the South West the least densely populated with 2.3 people per hectare. Within the South East there are 4.8 people per hectare.

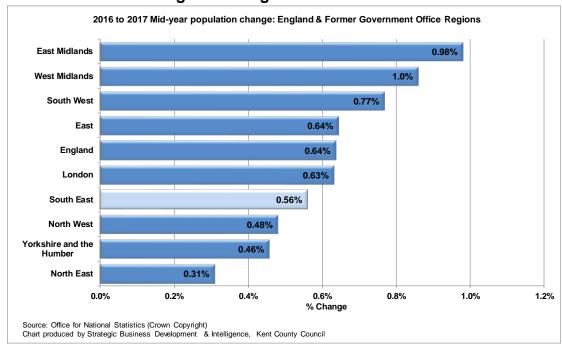
Population change between 2016 and 2017 for England and each of the former Government Office regions is presented in Table 1 and Chart 1.

Table 1: Revised 2016 to 2017 Mid-year population change: Former Government Office Regions & England

2016 to 2017 Mid-year population change: Former Government Office Regions & England								
			2016-2017	change				
						2017 MYPE		
					Area	density		
	2016 MYPE	2017 MYPE	Number	%	(Hectare)	(people per Ha)		
England	55,268,100	55,619,400	351,400	0.64%	13,031,001	4.3		
North East	2,636,600	2,644,700	8,100	0.31%	857,444	3.1		
North West	7,224,000	7,258,600	34,700	0.48%	1,410,721	5.1		
Yorkshire and the Humber	5,425,400	5,450,100	24,800	0.46%	1,540,535	3.5		
East Midlands	4,725,400	4,771,700	46,300	0.98%	1,562,347	3.1		
West Midlands	5,810,800	5,860,700	49,900	0.86%	1,299,827	4.5		
East	6,129,000	6,168,400	39,400	0.64%	1,911,873	3.2		
London	8,769,700	8,825,000	55,300	0.63%	157,214	56.1		
South East	9,030,300	9,080,800	50,500	0.56%	1,907,305	4.8		
South West	5,517,000	5,559,300	42,300	0.77%	2,383,734	2.3		

Source: Revised 2016 MYPE published 22/03/18 and 2017 MYPE published 28/06/2018 Office for National Statistics © Crown Copyright Presented by Strategic Business Development & Intelligence, Kent County Council
All figures are separately rounded to the nearest hundred and therefore may not sum.

Chart 1: Revised 2016 to 2017 Mid-year population change: Former Government Office Regions & England



Total population of counties (excluding Unitary Authorities) in the South East

The 2017 mid-year population estimates show that Kent is the most populous county council area in the South East with a population of 1,554,600 people. This also means that the Kent remains the largest non-metropolitan local authority area in England.

Hampshire is the second largest county in the South East with a population of 1,370,700. Buckinghamshire is the smallest county in the South East with a population of 535,900

Of the counties in the South East, Kent experienced the largest increase in population in both absolute and percentage terms between 2016 and 2017 growing by +14,200 people (+0.92%).

Surrey is the most densely populated county in the South East with 7.1 people per hectare, which is higher than the average density for the South East (4.8 people per hectare). Kent is the second most densely populated county with 4.4 people per hectare. Oxfordshire is the least densely populated county in the South East with 2.6 people per hectare.

Population change between 2016 and 2017 for each of the counties in the South East is presented in Table 2 and Chart 2.

Table 2: Revised 2016 to 2017 Mid-year population change: South East Counties

2016 to 2017 Mid-year population change: South East Counties								
			2016-2017	change				
	2016 MYPE	2017 MYPE	Number	%	Area (Hectare)	2017 MYPE density (people per Ha)		
South East	9,030,300	9,080,800	50,500	0.56%	1,907,305	4.8		
Buckinghamshire	533,100	535,900	2,900	0.54%	156,495	3.4		
East Sussex	549,600	552,300	2,700	0.49%	170,856	3.2		
Hampshire	1,365,100	1,370,700	5,600	0.41%	367,890	3.7		
Kent	1,540,400	1,554,600	14,200	0.92%	354,494	4.4		
Oxfordshire	678,500	682,400	4,000	0.58%	260,493	2.6		
Surrey	1,181,000	1,185,300	4,400	0.37%	166,252	7.1		
West Sussex	846,900	852,400	5,500	0.65%	199,087	4.3		

Source: Revised 2016 MYPE published 22/03/18 and 2017 MYPE published 28/06/2018 Office for National Statistics © Crown Copyright

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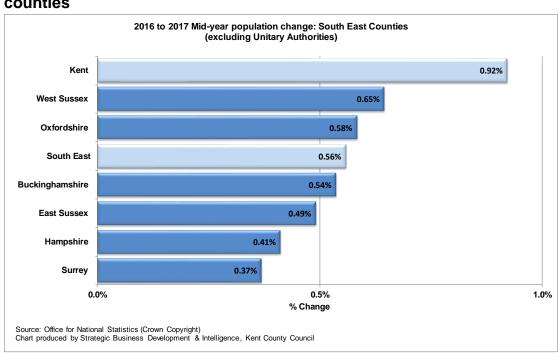


Chart 2: Revised 2016 to 2017 Mid-year population change: South East counties

Total population of unitary authorities in the South East

Brighton & Hove is the largest unitary authority in the South East with a population of 288,200 people according to the 2017 mid-year population estimates. Medway is the second largest unitary authority with a population of 277,600. Bracknell Forest has the smallest population with 120,400 people.

Portsmouth is the most densely populated unitary authority in the South East with 53.2 people per hectare, which is considerably higher than the average density for the South East (4.8 people per hectare). West Berkshire is the least densely populated unitary authority with 2.3 people per hectare. Within Medway there are 14.3 people per hectare.

Of the unitary authorities in the South East, Southampton has experienced the largest increase in population between 2016 and 2017 each growing by +2,000 people. This figure equates to a +0.79% increase for Southampton.

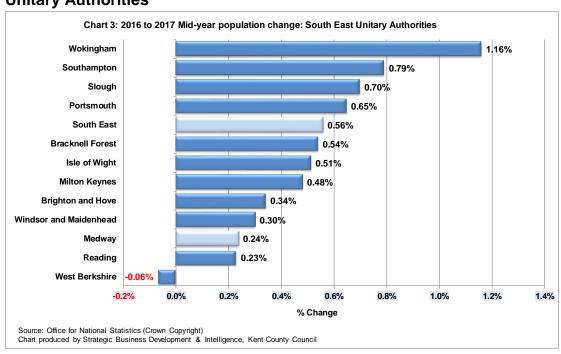
The population of Medway increased by +700 people (+0.24%) Population change between the 2016 and 2017 for each of the unitary authorities in the South East is presented in Table 3 and Chart 3.

Table 3: Revised 2016 to 2017 Mid-year population change: South East Unitary Authorities

2016 to 2017 Mid-year population change: South East Unitary Authorities							
			2016-2017	change		2017 MYPE	
	2016 MYPE	2017 MYPE	Number	%	Area (Hectare)	density (people per Ha)	
South East region	9,030,300	9,080,800	50,500	0.56%	1,907,305	4.8	
Medway	277,000	277,600	700	0.24%	19,354	14.3	
Bracknell Forest	119,700	120,400	600	0.54%	156,495	11.0	
West Berkshire	158,600	158,500	-100	-0.06%	70,417	2.3	
Reading	162,700	163,100	400	0.23%	367,890	40.4	
Slough	147,700	148,800	1,000	0.70%	3,254	45.7	
Windsor and Maidenhead	149,700	150,100	500	0.30%	260,493	7.6	
Wokingham	163,100	165,000	1,900	1.16%	17,897	9.2	
Milton Keynes	266,200	267,500	1,300	0.48%	199,087	8.7	
Brighton and Hove	287,200	288,200	1,000	0.34%	8,279	34.8	
Portsmouth	213,300	214,700	1,400	0.65%	10,938	53.2	
Southampton	250,400	252,400	2,000	0.79%	4,991	50.6	
Isle of Wight	140,300	141,000	700	0.51%	4,040	3.7	

Source: Revised 2016 MYPE published 22/03/18 and 2017 MYPE published 28/06/2018 Office for National Statistics © Crown Copyright

Chart 3: Revised 2016 to 2017 Mid-year population change: South East Unitary Authorities



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Total population of the Kent County Council Area and local authority districts within Kent

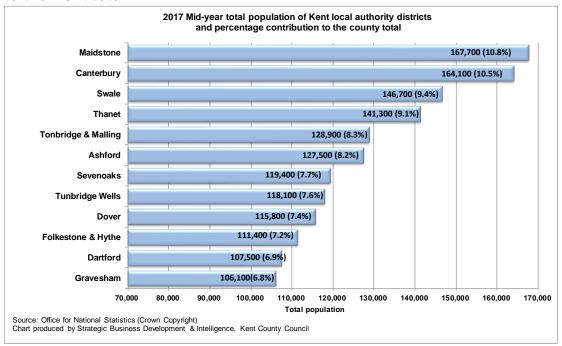
The total population of the KCC area is 1,554,600 people according to the revised 2017 mid-year population estimates.

Maidstone has the largest population with 167,700 people, which is equivalent to 10.8% of Kent's total population.

Gravesham has the smallest population in Kent with 106,100 people, which is equivalent to 6.8% of Kent's total population.

Chart 4 presents the total population of each of the Kent local authority districts, according to the 2017 mid-year population estimates, and the proportion each local authority contributes to the overall population of Kent.

Chart 4: 2017 Mid-year population estimate and percentage contribution to the Kent total



Dartford is Kent's most densely population local authority district with 14.8 people per hectare. Ashford is the least densely populated with 2.2 people per hectare.

The population density of Kent local authority districts is presented in Chart 5

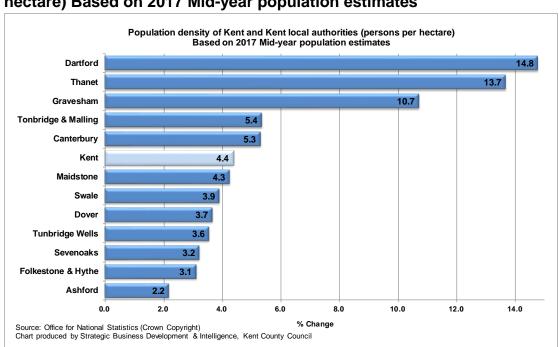


Chart 5: Population density of Kent and local authorities (persons per hectare) Based on 2017 Mid-year population estimates

The population of Kent grew by +0.92% between 2016 and 2017 which was a faster rate of growth than both the national average and South East average.

Of the local authority districts in Kent, Dartford has seen the largest increase in population in both absolute and percentage terms. Between 2016 and 2017 Dartford's population increased by +2,400 people, which is equivalent to a +2.28% increase.

Sevenoaks and Folkestone & Hythe (formerly Shepway) districts each experienced the smallest population growth, both with an increase of +400 people. This equates to a percentage increase on +0.35% and+0.36% respectively.

Gravesham was the only district to experience a decline in population between 2016 and 2017 with a loss of -100 people (-0.09%)

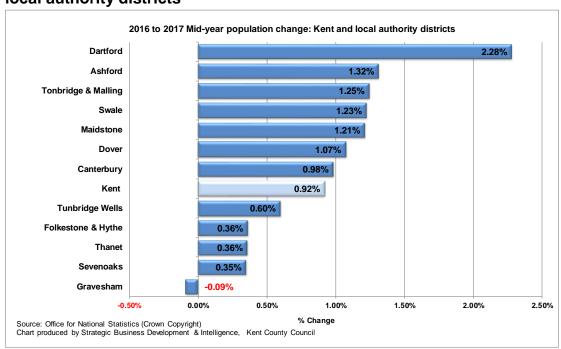
The population change between the 2016 and 2017 mid-year population estimate for Kent as a whole, and each of the local authority areas within Kent is presented in Table 4 and Chart 6.

Table 4: Revised 2016 to 2017 Mid-year population change: Kent and local authority districts

2016 to 2017 Mid-year population change: KCC Area and districts							
			2016-2017 change				
	2016 MYPE	2017 MYPE	Number	%	Area (Hectare)	2017 MYPE density (people per Ha)	
Kent (KCC area)	1,540,400	1,554,600	14,200	0.92%	354,494	4.4	
Ashford	125,900	127,500	1,700	1.32%	58,062	2.2	
Canterbury	162,500	164,100	1,600	0.98%	30,888	5.3	
Dartford	105,100	107,500	2,400	2.28%	7,276	14.8	
Dover	114,600	115,800	1,200	1.07%	31,507	3.7	
Gravesham	106,200	106,100	-100	-0.09%	9,902	10.7	
Maidstone	165,700	167,700	2,000	1.21%	39,333	4.3	
Sevenoaks	119,000	119,400	400	0.35%	36,923	3.2	
Folkestone & Hythe	111,000	111,400	400	0.36%	35,676	3.1	
Swale	144,900	146,700	1,800	1.23%	37,447	3.9	
Thanet	140,800	141,300	500	0.36%	10,334	13.7	
Tonbridge & Malling	127,300	128,900	1,600	1.25%	24,013	5.4	
Tunbridge Wells	117,400	118,100	700	0.60%	33,133	3.6	

Source: Revised 2016 MYPE published 22/03/18 and 2017 MYPE published 28/06/2018 Office for National Statistics © Crown Copyright Presented by Strategic Business Development & Intelligence, Kent County Council

Chart 6: revised 2016 to 2017 Mid-year population change: Kent and local authority districts



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RAF jets escort plane to Birmingham airport

7 March 2017





RAF jets intercepted a Hungarian plane after the aircraft lost communications, the Ministry of Defence has said.

Two Typhoons were dispatched from RAF Coningsby in Lincolnshire following the alert involving an aircraft with three crew, which had taken off from Romania.

The civilian plane was escorted to Birmingham International Airport, where the runway was closed for half an hour.

A spokesman said the response was routine and part of the RAF's air defence role to protect UK airspace.

One plane from Dublin was diverted to East Midlands Airport while the runway was closed.

Communication difficulties

The Saab 340 plane travelling from Bucharest landed in Birmingham at about 07:30 GMT.

The Typhoons were dispatched from RAF Coningsby in Lincolnshire and sent out on a "quick reaction alert".

The alerts are used to intercept unidentified aircraft because they cannot be identified any other way.

This can be when the plane is not communicating with air traffic control, there is no flight path filed, or the plane is not transmitting a recognisable radar code for surveillance.



A Voyager aircraft from Brize Norton in Oxfordshire was also dispatched to respond to the alert.

A Birmingham Airport spokeswoman said: "We can confirm that a private Saab 340 aircraft inbound from Bucharest to Birmingham and carrying three crew encountered communication difficulties during a flight earlier today.

"In accordance with normal operating procedures the aircraft was intercepted by military jets on arrival into UK airspace and was escorted up to its scheduled arrival into Birmingham."

According to Ministry of Defence figures, there were quick reaction alerts on 12 days in 2015. Eight were in response to Russian aircraft and four were to investigate other planes.



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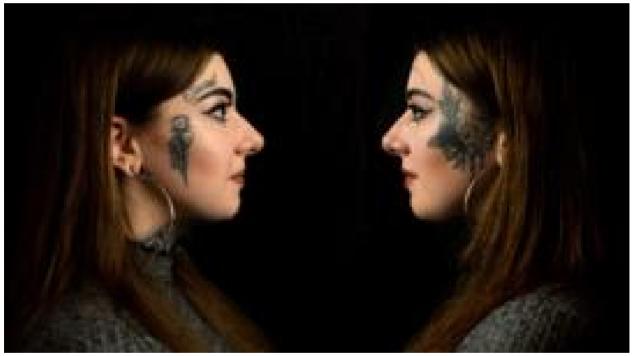
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3/1/2019 Antonov An-124

CARGO AIRCRAFT

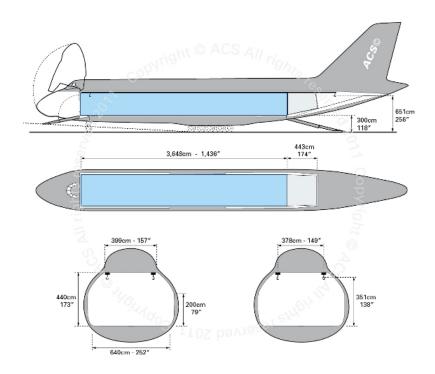
ANTONOV AN-124



ABOUT THIS AIRCRAFT

The An-124 is one of the largest aircraft in the world, with a huge capacity for cargo, drive-on loading ramps and built-in freight handling equipment.

AIRCRAFT LAYOUT



AT A GLANCE

CRUISE SPEED 800 KM/H / 497 MPH

RANGE

Short to medium haul

PAYLOAD

120000 KG / 264554 lbs

HOLD SIZE

3648x640x440 M / 1436"x251"x173"

DOOR SIZE

640x440 M / 251"x173"

SPECIFICATION

TOTAL LOAD VOLUME

750 m³ / 26486¹³

MAXIMUM RANGE

4650 KM / 2889 Miles

FERRY RANGE 16500 KM / 10252 Miles

RUNWAY REQUIREMENT

3000 M / 9842'6"

AIRCRAFT IMAGES

3/1/2019 Antonov An-124

