



RiverOak Strategic Partners

Applicant's Comments on the RIES

TR020002/D10/CoRIES
Examination Document

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Technical note:

Applicant's Comment on the Report on the Implications on European Sites (Planning Inspectorate Reference: TR020002, dated 17 June 2019)

Introduction

The Examining Authority (ExA) released their Report on the Implications for European Sites (REIS) on 18 June 2019. This brief technical note summarises the Applicant's comments on that report, as well as providing an update on discussions that have taken place with Natural England (NE) subsequent to the publication of the report. In summary, following further explanation by the Applicant regarding the conclusions of the RIAA, **NE have now agreed that there will not be an adverse effect on the integrity of the Thanet Coast and Sandwich Bay Special Protection Area (SPA).**

Background

The RIES concludes (at paragraph 5.1.3) that NE maintain (in their Deadline 8 submission) that further mitigation measures will be required to support the conclusions of no adverse effects on integrity for the Thanet Coast and Sandwich Bay SPA. This is contrary to the conclusion of the Report to Inform Appropriate Assessment (RIAA), prepared by the Applicant [REP7a-014]. No other substantive recommendations were made in the RIES.

Table 4.1 in the RIES provides further information on this matter, which centred around potential effects (noise/visual presence from aircraft) on birds using the SPA during the operational phase of the proposed development. Table 4.1 states:

"At ISH6 [EV-021] NE stated that further mitigation was required to be provided in respect of bird disturbance in Pegwell Bay (in particular relating to Turnstone) in order to support the conclusion of no adverse effects on integrity. This position was confirmed in its Deadline 8 submission. TDC's Deadline 8 submission [REP8-index number to be allocated] did not consider that mitigation via the Strategic Access Management and Monitoring Plan (SAMP) was an appropriate mechanism for mitigating this impact. The Applicant's Deadline 8 submission [REP8-index number to be allocated] committed to an s106 contribution "towards a scheme, or schemes, to be agreed with Natural England and Thanet District Council, to benefit turnstone in the SPA". Different contributions are discussed in the Applicant's s106 document and the ISH6 hearing summary."

As noted above, subsequent to the publication of the RIES, agreement between the Applicant and NE was reached on this matter. At Deadline 9, the Applicant provided the additional information that was the basis of the discussions with NE (refer to **Appendix A**). The additional analysis leading to NE's conclusions are summarised as follows:

- Confirmation that the proposed flight paths when planes leave to the east over Ramsgate and arrive from the east over Ramsgate, will be sufficiently similar to those used when the airport was previously operational;

- Information showing that the aircraft fleet mix now proposed will comprise no aircraft louder than the loudest that had previously operated, with the majority quieter than previously used;
- Confirmation that the loudest aircraft that had previously operated from Manston Airport will now be banned via the Noise Mitigation Plan and Chapter 3 of Part II, Volume 1 of Annex 16 to the Convention on International Civil Aviation which prohibits certain aircraft from operating within European airspace;
- Confirmation that the assessment provided in the RIAA [REP07a-014] is still considered valid; and
- Support to projects and studies relating to disturbance at Pegwell Bay.

Following the review of this information, NE confirmed that it now concurs with the Applicant's conclusion that the proposed operation of Manston Airport will not result in an adverse effect on the integrity of the Thanet Coast and Sandwich Bay SPA and Ramsar.

Applicant's findings and amendments required to the RIES

The Technical Note at **Appendix A** provides further information regarding former and proposed flight paths and former and proposed aircraft fleet mixes. With respect to flight paths, it concluded that the proposed take-off flight path to the east is sufficiently similar to that used when the airport was previously operational, and hence the adoption of this path will not result in adverse effects on turnstone on Pegwell Bay.

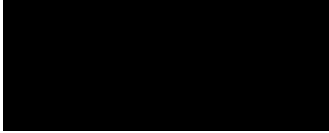
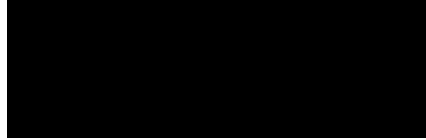
The freight fleet operating from Manston in its last years of operation included Douglas DC8-62, Boeing 747-200 and Boeing 747-400 aircraft. Based on noise certification data for these aircraft types, the DC8-62 and Boeing 747-200 are noisier aircraft than any of the fleet proposed when the airport is re-opened and operational. This accords with technological advancements and the general trend of modern planes being quieter than older aircraft types.

Despite the previous fleet mix comprising of aircraft that are as loud, or louder than the proposed fleet, disturbance as a result of airport operations in the northern part of Pegwell Bay has not been recorded previously. This is corroborated by the Pegwell Bay Bird Disturbance Study, undertaken over a two-year period between January 2010 and December 2011, when the airport was previously operational. Hence, it is concluded that the future operation of the airport will not result in the disturbance of birds using Pegwell Bay.

This conclusion supports the previous assessment and conclusion presented in the RIAA [REP7a-014], as detailed in Section 3 of the Technical Note (**Appendix A**) and illustrates that the proposed operation of Manston Airport will not result in an adverse effect on the integrity of the Thanet Coast and Sandwich Bay SPA.

Despite the conclusion of no adverse effect, the Applicant recognises that disturbance is a key pressure on SPA bird species. The Applicant acknowledges that unforeseen circumstances, such as the change of aircraft fleet mix, could result in minor impacts on the conservation objectives of the SPA. The likelihood is that the aircraft fleet mix will continue to become quieter, however, this is outside the direct control of the Applicant. As such, as detailed in Section 4 of the Technical Note (**Appendix A**) the Applicant has included a sum of £100,000 within the Section 106 agreement in order to provide additional support for projects and studies on disturbance in Pegwell Bay.

As a consequence, there are no longer any areas of disagreement between the Applicant and NE relating to the RIAA and the Applicant would request appropriate amendment of the RIES to reflect this agreement.

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Appendix A

Manston Airport DCO: North Pegwell Bay: Noise and Turnstone

1. Background

This Technical Note provides an update on the issue of the potential for aircraft noise to affect turnstone, a qualification feature of the Thanet Coast and Sandwich Bay Special Protection Area (SPA) and Ramsar site.

At Issue Specific Hearing 6 (ISH6) dealing with HRA matters (5 June 2019) Natural England stated they had a residual uncertainty in respect of the potential for aircraft noise to affect turnstone in Pegwell Bay. The Report to Inform the Appropriate Assessment issued at Deadline 7a (RIAA [REP7a-014]) had concluded that the species would not be affected and that there would be no adverse effect on site integrity. It was also acknowledged that NE and the Applicant are close to agreement however mitigation, probably in the form of a financial contribution towards an appropriate mitigation programme, would be required in the event that residual concerns cannot be resolved.

In terms of the substantive issue under discussion, during the winter turnstone regularly forage on the northern coastline of Pegwell Bay, part of the SPA/Ramsar, where noise levels of 70-75dB L_{Amax} are modelled to occur. These levels result only from flights departing east (so may only occur on 30% of the days in a given year) and will only be generated by the noisiest aircraft predicted to be operated in future (Boeing 747-400) and also planes classed as in the mid-range of noise generation (e.g. Boeing 737-800). Natural England's view was that due to exposure to these noise levels it could not be ruled out with certainty that turnstone would not react in a significant way to noise events generated by these departures. This could therefore undermine the conservation objectives of the SPA, specifically in the context of restoration of the turnstone population. That view is based solely on potential disturbance from noise and not from the visual stimulus of aircraft, as all planes will be sufficiently distant (i.e. above 500m in altitude and/or beyond 1km in lateral distance) to either have no or a negligible effect.

Given Natural England's residual uncertainty, mitigation was indicated as being required. As noted above, at ISH6 Natural England suggested that mitigation could be provided through a financial contribution by the Applicant to implementation of an appropriate project of the Thanet District Council's (TDC) Strategic Access Management and Monitoring Plan (SAMM) in respect of the Thanet section of the Thanet Coast and Sandwich Bay SPA¹. As neither TDC or the Applicant were aware of this suggestion prior to the Hearing, discussion amongst the parties has occurred subsequently. As a result of these discussions it has been determined that an appropriate project does not currently exist within the TDC SAMM to which a financial contribution could be made. Nonetheless the Applicant has offered to help fund a suitable project or projects, and if necessary to work with TDC and NE to ensure implementation on an appropriate timeline.

During the recent constructive post-Hearing discussions, once information submitted by the Applicant at Deadline 7a had been fully reviewed, Natural England brought to the attention of the Applicant valuable information about the previous operation of the airport, which was that aircraft flight paths departing/arriving to/from the east, were located around 1km to the north of Pegwell Bay, and that planes using these paths previously had not been reported to cause significant disturbance to the SPA birds. Natural England indicated that if the Applicant could show that the proposed flight paths were sufficiently similar to those used previously, and provide a narrative on the relative noisiness of the previous fleet mix

¹ Main Report. v1. April 2016. Prepared for Thanet District Council by Bayne, S (Blackwood Bayne Ltd) and Hyland, V. (V. Hyland Associates Ltd). <https://www.thanet.gov.uk/wp-content/uploads/2018/03/Thanet-DC-SAMM-MAIN-REPORT-Final-21st-April-2016.pdf>

compared with that proposed, then this would be an acceptable approach to removing Natural England's uncertainty regarding noise and turnstone and allow them to concur with the conclusions of the RIAA [REP7a-014]. Their view was supported by the Pegwell Bay Bird Disturbance Study², undertaken over a two year period between January 2010 and December 2011 when the airport was previously operational, which did not report that flights from the airport were a cause of disturbance to the birds in Pegwell Bay.

This Technical Note provides the following information:

- Confirmation that the proposed flight paths when planes leave to the east over Ramsgate and arrive from the east over Ramsgate, will be sufficiently similar to those used when the airport was previously operational;
- Information showing that the fleet now proposed will comprise no planes louder than previously operated, with the majority quieter than previously used
- Confirmation that the loudest planes that previously operated from Manston Airport will now be banned via the Noise Mitigation Plan and Chapter 3 of Part II, Volume 1 of Annex 16 to the Convention on International Civil Aviation which prohibits certain aircraft from operating within European airspace.
- Confirmation that the assessment provided in the RIAA [REP07a-014] is still considered valid; and
- Support to projects and studies on disturbance in Pegwell Bay.

2. Information on flightpath and fleet mix

2.1 Former and proposed flightpaths

The proposed flight path swathes are shown in Figure 1, informed by Figure 4.4 of the RIAA. Although the precise flight paths are subject to approval under the Civil Aviation Authority airspace change process, the flight path indicated for planes leaving to the east over Ramsgate and arriving from the east over Ramsgate is unlikely to deviate significantly from that indicated on Figure 1. At this distance from the airport there is little scope for variation.

The flight path used to the east of the airport during the period when the airport was previously operational is superimposed onto the proposed flight paths figure included in the Application (see Figure 1). The flight path shown is very similar to the flight path previously used which, based on the feedback from Natural England, would not result in disturbance of turnstone in Pegwell Bay.

2.2 Fleet mix and flight numbers

In the last five-ten years of operation, there were approximately 1,000 freight and 1,000-1,500 passenger Air Traffic Movements annually to/from Manston (Tom Wilson, Viscount Aviation, pers. comm.).

The freight fleet operated from Manston in its last years of operation comprised almost entirely of Douglas DC8-62, Boeing 747-200 and Boeing 747-400 aircraft (Tom Wilson, Viscount Aviation, pers. comm.). Based on noise certification data for these aircraft types, the DC8-62 and Boeing 747-200, which comprised the

² Swandale, T and Waite, A. 2012. Pegwell Bay, Kent: Bird Disturbance Study 2010-2011. Kent Wildlife Trust, Maidstone.

majority of air transport movements, are noisier aircraft than any of the fleet proposed³ when the airport re-opens. The Boeing 747-400 was the quietest of the three.

The risk of the noisiest aircraft being operated in future is minimised by the Quota Count approach detailed in the Noise Mitigation Plan [REP8-004], and some models are now banned by EU Legislation. Neither the Boeing 747-200 nor the DC8-62 are Chapter 3 compliant unless fitted with 'hush kits' and as such they could not use Manton Airport unless they are significantly quieter than those that flew under the previous operation.

Despite the previous fleet mix comprising planes that are as, or more, noisy as the noisiest proposed for future use, at the time of the two year Pegwell Bay bird disturbance study, disturbance as a result of airport operations in the northern part of Pegwell Bay was not recorded.

The numbers of flights forecast were presented in Appendix 3.3 [APP-044] of Environmental Statement Chapter 3 [APP-033]. The number of flights in Year 2 would be approximately double the number of commercial flights previously operated, and numbers would increase to Year 20 as per the forecast. However, although more frequent, the fleet will comprise no planes louder than the quietest of the freight planes operated previously, and as indicated above, disturbance as result of airport operations in the northern part of Pegwell Bay was not recorded.

3. Assessment

The proposed take-off flight path to the east is sufficiently similar to that used when the airport was previously operational that, based on the feedback from Natural England, it can be concluded that adoption of this path would not result in adverse effects on turnstone. The fleet mix proposed comprises no planes louder than the quietest freight aircraft previously operated, with the majority quieter than previously used, which accords with the general trend of more modern planes being less noisy than older aircraft types. Therefore, as the previous operation of the airport was not reported to disturb birds, despite a forecast increase in the number of flights, it can also be concluded that future operation with a predominantly less noisy fleet will also not result in disturbance of the birds using Pegwell Bay.

This supports the previous assessment and conclusion presented in the RIAA [REP7a-014] as detailed below.

- During the noise monitoring undertaken by the Applicant at Pegwell Bay in February-May 2019⁴, peak noise levels exceeded 70 dB_{L_Amax} on average 10 times per hour from the northern Vantage (monitoring) Point, and exceeded 60 dB_{L_Amax}, 121 times per hour. Overall therefore, operation of the airport will result in a small number of additional noise events of a similar magnitude to those already occurring in the Bay;
- The Applicant's Bird Disturbance Study⁵ identified no occurrences where noise alone (i.e. arising from a disturbing source further than 500m from birds present) elicited a response in the birds present. Similar findings supporting this have been found from disturbance studies for other developments for example work undertaken by Jacobs⁶ for the recent Wylfa DCO examination.
- Although the noise modelling indicates that the area (at the base of West Cliff) frequented by turnstone will experience levels up to 75dB, the cliffs are likely to dampen the noise;

³ Appendix 3.3 [APP-044] of Environmental Statement Chapter 3 [APP-033] details the proposed fleet mix.

⁴ Appendix G of the RIAA [REP7a-014].

⁵ Appendix G of the RIAA [REP7a-014].

⁶ Jacobs (2018). Wylfa Newydd Project. *Addendum to Seabird Baseline Report: Disturbance Monitoring at Cemlyn Lagoon*. PINS Ref. EN01007, December 2018.

- The visual stimuli provided by aircraft can be further discounted due to distance and the presence of the cliffs;
- Research suggests that birds react to the presence of aircraft in flight if they are perceived to represent a threat (for example, their appearance and flight profile of the aircraft appears to be similar to that of an avian predator such as a peregrine). This may explain why low-flying helicopters, light aircraft and military jets often elicit a much more severe response in birds than higher flying commercial jets;
- Aircraft noise results in gradual increase and decrease in noise over a longer period than a sudden loud noise to which birds are far more sensitive;
- Flights will be infrequent with the predictability of flight paths again reducing the potential for disturbance, and the loudest planes make up a relatively small proportion of the forecast fleet and that only certain flight directions will occur on any one day;
- Results from the Pegwell Bay Waterbird Disturbance Survey in 2018/19 provide no evidence to indicate that the birds using Pegwell Bay, or the north Thanet coast, respond to the overflights of commercial jets, with only low flying helicopters and micro-lights eliciting a response from the combined visual and noise stimulus. It is however, acknowledged that the flight paths and altitudes of the commercial jets currently flying over or close to Pegwell Bay are different and higher respectively to those for the Proposed Development;
- There is no publicly available evidence suggesting that the conservation objectives of the SPA were impacted by aircraft noise whilst Manston Airport was operational. There is no historical evidence to suggest that turnstone were displaced from areas of Pegwell Bay close to the flight paths during the period when Manston airport was operational, and conversely, numbers of turnstone have declined since operation ceased (Hodgson, 2016⁷).

The proposed operation of Manston Airport will therefore not result in an adverse effect on the integrity of the Thanet Coast and Sandwich Bay SPA and Ramsar.

4. Support to projects and studies on disturbance in Pegwell Bay

Despite the conclusion of no adverse effect presented above, the Applicant recognises that disturbance in Pegwell Bay is a key pressure on the SPA species present, and that this is the subject of on-going initiatives including:

- Implementation of the Strategic Access Management and Monitoring Plan (SAMM) by Thanet District Council. This plan seeks to reduce the pressure exerted on turnstone in the SPA by an increase in recreational pressure resulting from new residential development;
- Monitoring of levels of disturbance in Pegwell Bay by Kent Wildlife Trust.

The Applicant has concluded that no adverse effects would occur that would affect achievement of the conservation objectives of the SPA. Recent discussions have centred around an understanding that bird populations were not affected by disturbance when the airport was previously operating and the fact that quieter aircraft will use the airport under the current proposals. Nonetheless, following discussion with Natural England it is acknowledged that unforeseen circumstances (such as changes in the aircraft fleet mix)

⁷ Hodgson, I. (2016). *Thanet Coast Turnstone (Arenaria interpres) monitoring, January – February 2016*. Report to Natural England. Sandwich Bay Bird Observatory Trust, Sandwich.

could result in minor impacts on the conservation objectives of the SPA. In all likelihood the aircraft fleet mix will continue to become quieter however, as this is outside of the control of the Applicant, the following precautionary mitigation is proposed:

1. The noise mitigation plan secures a ban on certain noisier aircraft as well as placing an overall noise envelope and QC based limit on aircraft movement. Both of these factors will motivate the airport to accept quieter aircraft as both the QC measure as well as the noise envelope would be exceeded more rapidly if noisier aircraft use the airport.
2. The Applicant will, through a Section 106 agreement with Thanet District Council, provide a sum of £100,000 to be used to mitigate any impacts on bird populations in Pegwell Bay.
3. The first £20,000 of this sum will be used to support the current bird disturbance monitoring study being undertaken by Kent Wildlife Trust.
4. If it is found that the operation of the airport is affecting bird populations, the remaining sum will be made available to Kent Wildlife Trust (KWT), Thanet District Council (TDC) and Natural England (NE) (mechanism to be confirmed) to develop and support projects directly relevant to species affected by disturbance. This element will have two phases:
 - a. KWT, TDC and NE to develop mitigation plan (with support from the Applicant/Operator as appropriate)
 - b. Use of the remaining funds (£80,000) for implementation of mitigation schemes to assist with restoration measures for affected bird population. It is likely that this would involve measures such as access control to minimise human disturbance such as water sports and dog walking which already occur at locations such as West Cliffe.
5. KWT will also have access to the Community Trust Fund established through the noise mitigation plan. This fund makes available £50,000 per annum for community groups. It is administered by the Airport Consultative Committee which will allocate funding according to need on the basis of applications made by community groups or projects affected by noise.

5. Conclusion

Following review of the information provided in this Note, Natural England has confirmed that it concurs with the assessment presented in Section 3, that the proposed operation of Manston Airport will therefore not result in an adverse effect on the integrity of the Thanet Coast and Sandwich Bay SPA and Ramsar, and that the funding/support proposed in Section 4 is appropriate.

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