

## **A JOINT STATEMENT FROM BLACKPOOL AIRPORT AND WALNEY & WARTON AERODROMES ON VHF RADIO COMMUNICATIONS**

### **Background & Current Position**

The issue of impacts on Very High Frequency (**VHF**) radio communications utilised by aircraft has been raised by the Civil Aviation Authority (**CAA**) as a potential flight safety issue on the back of a proliferation of additional turbines near to Prestwick Airport in Scotland. In this regard, it was discovered that traffic passing an area that previously had no communication issues at low level was now subject to areas of poor radio signal.

Morgan Offshore Wind Limited, the applicant (**the Applicant**) for the Morgan Offshore Wind Farm: Generation Assets project (**the Project**), has commissioned assessments undertaken by National Air Traffic Services (**NATS**) to plot the risk of communication blackspots or poor radio telephony (**r/t**) at the request of Blackpool Airport and Walney and Warton Aerodromes (together, **the Aerodromes**) – the concern being that the existing operational wind farms in the Irish sea, taken together with those which are currently proposed (including the Project, Mona Offshore Wind Farm (consented on 4 July 2025) and Morecambe Offshore Wind Farm – together, **the Proposed OWFs**) could cause similar potential blackspots for aircraft flying at low level, whether that is over, inside or behind the wind turbine array/s.

The NATS reports, which assess the impact of the Project alone (and which are commented on in further detail below), were delivered on 10 March 2025 (in the case of Blackpool Airport) and on 21 May 2025 (in the case of Walney and Warton Aerodromes).

CAP 764 – at page 30, paragraph 2.46 – refers to the cumulative effect of wind farms.

To date, Walney and Warton Aerodromes have not seen any data from the Applicant assessing the cumulative effect of the existing operational wind farms in the Irish sea and the additional impact which will arise from the Proposed OWFs on Air Traffic Service (**ATS**) provision.

Blackpool Airport has commissioned an assessment of the cumulative impact of the Proposed OWFs on VHF, which has been undertaken at the expense of the applicants for the aforesaid projects (together, **the Applicants**). This report, which was prepared by Cyrrus and delivered to Blackpool Airport in May 2025, is more detailed than the 'Project-alone' NATS reports (referred to above) and confirms that there will be impacts on VHF and DF at Blackpool Airport arising from the Proposed OWFs (noting that the report does not take account of the existing operational wind farms in the Irish sea). Blackpool Airport has shared the relevant findings of the Cyrrus report with BAE Systems as certain of the data it contains has informed the mitigation requirement with regard to impacts on r/t at Walney and Warton Aerodromes.

CAP 764 – at page 27, paragraph 2.36 – states as follows:

*"Where an ANSP [Air Navigation Service Provider] determines that it is likely that a planned wind turbine development would result in any of the above effects on their CNS infrastructure, this may not, in itself, be sufficient reason to justify grounds for rejection of the planning application. The ANSP must determine whether the effect on the CNS infrastructure has a negative impact on the provision of the ATS. The developer should pay for an assessment of appropriate mitigating actions that could be taken by the ANSP and/or wind energy developer to deal with the negative impact. The position of an ANSP at inquiry would be significantly degraded if they had not considered all potentially appropriate mitigations. It is essential that wind energy developers form*

*a relationship with the relevant ANSP in order to deal with the impact that their development may have, prior to making an application."*

Noting the CAP 764 guidance, the Aerodromes consider that the Applicants have partially discharged the CAA requirements.

Morgan Offshore Wind Limited has paid for the NATS reports and, in Blackpool Airport's case, the Applicants have covered the costs of an additional cumulative impact report. These reports identify an operationally detrimental impact on radio communications at lower altitudes, in the vicinity of the Project, which under CAA guidance is considered unacceptable. Discussions concerning possible mitigations have taken place between the Applicants and the Aerodromes. However, there has not been an "assessment of appropriate mitigating actions" and, in the case of Walney and Warton Aerodromes, no offer has been made by the Applicants to fund such an assessment.

### **NATS Reports**

As stated above, the NATS reports consider the impact of the Project alone. The Aerodromes are not satisfied that the assessments undertaken are comprehensive or fit for purpose. A summary of their concerns is set out below.

The assessments are based on smaller turbines than those proposed as part of the Project, as NATS do not have the specific modelling tool required for turbines of this size to serve as a baseline (as recommended in the CAA guidelines – CAP 670 Part B, Section 4: Appendix A to GEN 02: Methodology for the Prediction of Wind Turbine Interference Impact on Aeronautical Radio Station Infrastructure). Due to the processing power required to map the potential obstacles, only a partial modelling of the Project (which is non-compliant with CAA modelling requirements) has been undertaken (three turbines versus the maximum number proposed). As a result, the Aerodromes consider that the NATS reports are lacking in a significant level of detail and do not provide a true indication or worst-case assessment of the impacts on VHF arising from the Project alone.

Following a request for clarification from the Aerodromes, an email with an explanation as to why the reports are lacking in the regulatory information required was provided by NATS – a copy of which is appended to this joint statement. This email confirms that the current guidelines for modelling the turbines do not match the height proposed as part of the Project and NATS did not have the spare computing capacity to fully model the effects which the proposed turbines will have on VHF at the Aerodromes.

### **Impact on the Aerodromes**

The construction and operation of the Project (both alone and cumulatively with the Proposed OWFs) will result in degradation to VHF radio communications to aircraft within the vicinity of the Project, where currently there are no r/t issues. The Project has the potential to impact all three Aerodromes' VHF radio communications.

The Project is directly beneath the direct arrival approach and safeguarded areas for runway 10 approaches at Blackpool Airport. Any potential degradation in these areas would be a risk to flight safety – particularly given the offshore rigs helicopter movements that operate in the vicinity. Communications are vital in providing a safe service and an alerting service in the event that an aircraft has an emergency.

The impact on Walney and Warton Aerodromes would be similar to that described above – the ATS Unit at each of the aerodromes will run the risk of losing 2-way communication with low-level rotary/fixed wing traffic (as a result of the “masking effect” caused by a proliferation of additional turbines to the existing arrays, which is the situation experienced in the vicinity of Prestwick Airport), including low level test and development operations, search and rescue operations, low level transits of the Irish Sea and the offshore rigs helicopter traffic (to whom Walney and Warton Aerodromes provide a service during their operational hours).

For these reasons, the Aerodromes consider it appropriate that their concerns regarding the shortcomings of the NATS reports, and NATS’ response to the concerns they’ve raised, are brought to the attention of the Secretary of State.

### **Mitigation for VHF Impacts**

It is agreed between the Aerodromes that the adverse impact to VHF requires mitigation.

The CAA has advised that only partial mitigation is available (as the r/t cannot have a repeater or similar located in the Irish Sea, any mitigation can only be classed as partial rather than full mitigation, as communications will still be disrupted) and would need to be implemented, with this being an appropriate Secondary Surveillance Radar (**SSR**) feed with Mode-S ADSB injection to comply with the CAA Future Airspace Modernisation programme, along with the associated infrastructure that would be configured as a Flight Information Display (**FID**). This would enable the staff of the ATS Unit at each of the Aerodromes to see that an aircraft is still airborne if r/t is lost, offering an alternative means of monitoring aircraft.

An SSR feed would also enable ATS staff to identify if aircraft are transponding an emergency code in the event of r/t issues, enabling the relevant ATS Unit to provide an alerting service and initiate emergency actions as they are required to do in accordance with Regulation (EU) No. 923/2012 SERA.10001 (as is detailed in CAA CAP 493 Manual of Air Traffic Services). An alerting service is provided to set in motion search and rescue aid for aircraft in an emergency and is provided by all three Aerodromes.

Furthermore, Blackpool Airport and Warton Aerodrome currently (and Walney Aerodrome in the near future) have a requirement to guard and monitor 121.5MHz (Distress & Diversion frequency) down to circuit altitude 1000ft. Should an ATS Unit closer to an emergency event be better placed to handle the situation, Distress & Diversion (based at NATS Swanwick, Hampshire) may elect to delegate Operational Control to the nearest Unit.

An expansion to the existing Transponder Mandatory Zone to cover the Proposed OWFs, and bolster the effectiveness of the SSR feed, would represent an additional safety assurance as the Aerodromes’ ATS Units would have the ability to watch traffic within and behind the turbine arrays to ensure, in the case of losing r/t communications, that the traffic is still airborne.

The CAA has already checked and verified that the SSR feed is both suitable and appropriate to serve as a partial mitigation for the anticipated degradation in r/t at Blackpool Airport and Walney Aerodrome.

Regarding Warton, the Aerodrome currently has an SSR feed. Were the system to be configured as a FID, it is considered that it would provide a partial mitigation in respect of any adverse impact on VHF radio communications (as well as DF and UHF) to aircraft operating in and around the Aerodrome.

## **Conclusion**

The Project alone, and cumulatively with the Proposed OWFs, will have an operational impact on radio communications at Blackpool Airport and Walney and Warton Aerodromes. The only partial mitigation available, which has been confirmed by the CAA, is the introduction of an SSR FID system. No full mitigation solution is understood to be available.

Blackpool Airport is the primary diversion aerodrome in the event of either Walney or Warton Aerodrome not being available for operational or weather-related reasons. Accordingly, securing appropriate mitigation to address any loss of radio communications over the Irish Sea due to the degradation of r/t is imperative and its importance cannot be overstated.