



Norfolk Vanguard Offshore Wind Farm

Statement of Common Ground

NATS En-Route Safeguarding



NORFOLK VANGUARD OFFSHORE WINDFARM (REFERENCE: EN010079)

STATEMENT OF COMMON GROUND ("SOCG")

BETWEEN

NORFOLK VANGUARD LIMITED ("THE DEVELOPER")

AND NATS (EN ROUTE) PLC ("NERL")

together the "Parties"

14 January 2019

Statement of Common Ground between the Developer and NATS (En Route) plc ("NERL") The Developer and NERL agree the following:

- 1. The NERL objection to the Norfolk Vanguard Offshore Wind Farm (OWF) turbines (Reference: EN010079) is separate to and distinct from, objections that have been or could be made by other aviation statutory consultees.
- 2. The Norfolk Vanguard OWF comprises two distinct areas, Norfolk Vanguard (NV) East and NV West which are located in the southern North Sea, approximately 70 kilometres (km) and 47 km from the nearest point of the Norfolk coast respectively. If constructed the proposed operational wind turbines will, without appropriate radar mitigation, have an adverse technical impact on NERL's Primary Surveillance Radar ("PSR") system at Cromer ("the Cromer PSR Radar") and other NERL infrastructure by causing radar clutter effects that would be detectable by the Cromer PSR system. Other stakeholders including airports and Air Navigation Service Providers (ANSPs) take a feed from the Cromer PSR and therefore could also be affected. NERL have consulted with Eurocontrol whom have stated that that they have concerns with the intended mitigation solution. The Developer has not offered any evidence to the contrary and accepts that a radar mitigation scheme will be required to deal with the radar harm caused by its operational turbines.
- 3. A technical solution is therefore required to mitigate the clutter effects caused by the proposed operational wind turbines at the Norfolk Vanguard OWF on NERL's Primary Surveillance Radar system at Cromer.
- 4. Any technical mitigation solution may include, but not be limited to, blanking of the radar coverage at Cromer affected by the Norfolk Vanguard OWF turbines.
- 5. As there are currently no operational primary surveillance radars available to NERL within or integrated within the NERL infrastructure at the date of this SOCG that provide the sufficient level of radar coverage for NERL's air traffic controllers to mitigate the proposed turbines at the Norfolk Vanguard OWF, there are no existing solutions available to mitigate the adverse radar impact that will be caused by the proposed operational turbines. However, under the specific circumstances of the proposed development at the Norfolk Vanguard OWF, the Parties agree that there is a technical solution available and that solution is reasonably expected to come forward.
- 6. A radar mitigation solution based on a range of technical and funding requirements is being progressed by NERL. Concurrently, a request for an Airspace Change Proposal (ACP) has been submitted to the Civil Aviation Authority (CAA) and NERL are currently consulting on the change proposed.
- 7. Through the ACP, the following phases (each a "Phase") will be completed:
 - Phase 1A The identification or confirmation and detailed design of a potential mitigation solution ("Potential Solution");
- 8. On 14 September 2017, the Developer, NERL and NATS (Services) Limited (NSL) (together "NATS") entered into an agreement to seek to establish a mitigation solution for impacts on the NERL Cromer PSR and potential impacts on NATS' operations. Subsequently, NATS submitted a Statement of Need on behalf of the Developer to the CAA within the airspace change process detailed in CAA Civil Aviation Publication (CAP) 1616- Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements (culminating in the submission of the ACP). The CAA have agreed with the submission of the Statement of Need within phase 1A of the change process meaning that NSL can proceed with the remainder of the process on behalf of the Developer.
 - (Subsequent) Follow on Phases i) development of design principles (including stakeholder engagement); ii) proposed solution(s) including consultation; iii) finalising the proposal and submission of the proposal to the CAA; iv) Publication of the CAA decision.
 - Based on the ACP process outlined above, and the status of the on-going discussions between the Applicant and NATS, it is considered that suitable mitigation for impacts of NV OWF on the NATS Cromer

PSR system is available within the required timeframes for the Project through blanking of the Cromer PSR and regulatory acceptance of the ACP.(Subsequent) Follow-on Phase – i) Validation of Potential Solution; ii) Implementation and Integration of Potential Solution; and iii) Certainty on operation of that Potential Solution.

In line with the CAP 1616 process, the next Stage (2) and subsequent stages will be set out in an agreement currently under negotiation between the Developer and NATS.

- 9. Any consents and agreements relating to a service from, or asset of, a third party supporting a radar mitigation scheme must be made subject to NERL's ability, if necessary, to intervene directly at the Developer's cost, (in accordance with any relevant agreements reached between the Developer and NERL) and to operate that service or asset itself in the event that it does not meet NERL's technical requirements.
- 10. The high level requirements of any acceptable radar mitigation scheme ("the Scheme") include that the Scheme:
 - does not affect the safe and efficient provision of NERL air traffic services or NERL's licence obligations;
 - will enable co-operation and co-ordination with NERL's operations;
 - can be programmed by the Developer to minimise any delay or disruption to NERL;
 - will not impede or adversely affect the safe or efficient provision of air traffic services; and
 - will minimise complication to the airspace affected by the Proposed Development.
- 11. NERL has agreed to provide reasonable cooperation to the Developer in relation to the development of a Scheme and a solution through signed commercial agreement with the Developer.
- 12. The Parties are in discussions as to the need for and form of a suitable Requirement to be included in the draft Development Consent Order to secure the mitigation referred to above.
- 13. The objection to the consent of the proposed wind turbines at the Norfolk Vanguard OWF was made on the basis of concerns and objectives relating to aviation and safety and efficiency which NERL must address or meet (as applicable) in accordance with both the Transport Act 2000 and its licence to provide air traffic services.

| NORFOLK VANGUARD LIMITED | |
|--------------------------|----------|
| Signatory | |
| Name | |
| Position | |
| on | 2019 and |
| NATS (EN ROUTE) PLC | |
| Signatory | |
| Name | |
| Position | |
| on | 2019 |
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This Statement of Common Ground has been agreed by: