# A18. TELECOMMUNICATIONS AND AVIATION

#### A18.1 INTRODUCTION

The design of the proposed Viking Wind Farm has changed since the Section 36 application, and its associated Environmental Statement, was submitted in the Spring of 2009. This chapter describes how these changes would affect telecommunications and aviation interests.

Before reading this chapter, please first read Addendum Chapter A1, the Introduction, and Chapter A4, the Development Description. Failure to read these two chapters carefully may lead to a misunderstanding of the assessment work described in this chapter. Furthermore, because this addendum chapter is not intended to provide a complete new assessment of the issues, but instead provides a discussion of the effects of the work which has taken place since the 2009 ES was submitted, it must be read in conjunction with the Telecommunications and Aviation chapter of the 2009 Environmental Statement.

#### A18.2 CONSULTATION RESPONSES

For a full list of all comments from statutory consultees please refer to Appendix A1.1.

In summary, responses were received from National Air Traffic Services (NATS), Ministry of Defence (MOD), Highlands and Islands Airports Ltd (HIAL) and the Civil Aviation Authority (CAA), none of whom objected to the proposal. An objection was received from Serco Defence and Aerospace (now Serco Defence Science and Nuclear) who are the Licensee's Representative for Scatsta airfield. The objection related to a number of the turbines in the Delting quadrant adjacent to the airfield and is discussed in more detail later in this chapter. This objection was also lodged with the CAA. Further consultation with Scatsta Airport's owners, licensee and operators has resulted from the Serco objection.

T-Mobile also objected to two turbines which may affect one of its telecommunications links. Further information has been provided and T-Mobile has responded that the micrositing of turbines should resolve their issue.

#### A18.3 CHANGES IN THE POLICY CONTEXT

There have been no changes to international or national aviation legislation which affects the aviation assessment of the site since the 2009 ES was completed.

#### A18.4 CHANGES IN METHODOLOGY

No changes have been made to the methodology.

# A18.5 CHANGES IN BASELINE CONDITIONS

Since the submission of the 2009 ES the owners, licensee and operators of Scatsta airport have been involved in a project to upgrade the airport and improve its flexibility and facilities. The aims of this work are understood to be to reduce the minimum descent

height for aircraft making approaches to runways 06 and 24; to provide a means to reduce the required separation between aircraft; to improve communications and implement a GPS landing procedure on runway 06. This plan of work was essentially designed to improve the airport's ability to be used in poorer weather conditions thereby reducing the potential for aircraft to be diverted to other airfields.

It is understood that recently the Civil Aviation Authority (CAA) has requested that Scatsta airport's runway be upgraded to Code 3. This requires the production of a Safety Case which is a relatively time consuming operation. This has now been submitted and is awaiting approval.

Viking Energy Partnership has also carried out a TV impact report (see Appendix A18.1) which identifies the existing TV and radio coverage levels around the wind farm area and beyond.

#### A18.6 CHANGES IN THE PROPOSED WIND FARM

Seven turbines have been removed from the Delting quadrant due partly to the Serco objection. Turbines were removed following consultation with the airport owners, licensee and operator. This mitigated for the potential impact on the existing Obstacle Clearance Altitude minima for visual circling procedures and the potential impact on the procedure minima for automated localiser/distance measuring equipment (LOC/DME) approaches and surveillance radar approaches (SRAs) to runway 24.

There are ongoing discussions between the airport and the Directorate of Airspace Policy (DAP) regarding further operational procedures at the airport (area navigation (RNAV) for runways 06 and 24). Additionally, it is understood the airport has yet to finalise details of a decision regarding repositioning of the ACR 430 primary surveillance radar to provide surveillance radar facilities. The re-coding of the runway to a Code 3 runway has the potential to impact the obstacle surveys conducted thus far which will need to be resubmitted as a result.

A further eight turbines have been identified, beyond the seven already removed, which have the potential to affect the non-directional beacon (NDB) procedure to runway 24, causing an increase in the procedure minima, or which might impact on any proposed RNAV approach procedures on runway 06. The NDB is intended to be the secondary approach aid to runway 24, with the primary approach aid being the LOC/DME.

The outcome of the discussions with the DAP and the runway recoding Safety Case will dictate the mitigation available to the windfarm in the vicinity of the airport. Once these discussions and studies are complete, and the outcomes known, the developer can discuss any requirement for further mitigation. Possible mitigation solutions could involve the removal of anything up to a further eight turbines from the Delting area and/or working with the airport to improve their surveillance radar capability.

# A18.7 CHANGES IN AGREED MITIGATION

To date, seven turbines have been removed from the Delting quadrant. Four of these mitigate the potential impact on SRA and LOC/DME approaches to runway 24 and the Obstacle Clearance Altitude for visual circling approaches at the airfield. Additionally, some of the seven removals help to mitigate the potential impact on any proposed RNAV

approach on runway 06 although it is possible that further deletions may be required in that respect.

Any communications links that may be affected can be rerouted via other masts; or turbines can be microsited to avoid the links. TV signals may be affected at some properties and this can be rectified by the installation of satellite TV receivers at these properties.

# A18.8 CHANGES IN THE IMPACT ASSESSMENT

The present agreed removal of seven turbines within the Delting quadrant has eliminated the potential impact of the development on the primary approach aid to runway 24 and the visual circling minima for the airport. In addition, it has gone some way in reducing the potential impact on the airfield's proposals to upgrade.

The ongoing work in relation to the recoding of the runway and the design of the RNAV procedures for runway 06 and 24 have the potential to affect up to a further eight turbines. However, the results of this work are required before the impact of the proposed development and suitable mitigation can be identified.

The TV impact assessment will be carried out again, before any proposed construction commences, to capture the impact of the digital switchover as digital signals are believed to be less susceptible to interference.

#### A18.9 SUMMARY AND CONCLUSIONS

The Scatsta airport upgrading work has highlighted a number of turbines which would unacceptably affect the procedures at the airport. Seven turbines have been removed which fully mitigate two of the issues and partially mitigate potential impacts on the plans to upgrade.

Further work is ongoing regarding the potential relocation of the airport radar, the recoding of the runway, and the design and implementation of RNAV procedures to runways 06 and 24. The wind farm proposals have the potential to affect the NDB and RNAV procedures; however, until the ongoing work has been completed the impacts cannot be confirmed. The outcomes of that work will inform what further mitigation may be required, if any.

Possible mitigations could involve removing further turbines from the Delting quadrant and/or working with the airport to increase their surveillance radar capability.

# A18.10 REFERENCES

Nil.