Novar 1 Wind Farm Repowering

Chapter 12 - Aviation

September 2026



12. Aviation

12.1 Executive Summary

12.1.1 This chapter assesses the potential impacts of the Proposed Development on aviation. It finds that there is potential for effects on Inverness Airport instrument flight procedures (IFPs) and primary surveillance radar (PSR) and on military low flying.

12.1.2 Effects on IFPs are expected to be minor. A formal IFP assessment report has been commissioned by the Applicant. Effects on the Inverness Airport PSR are expected to be minor since only one of the turbines would be within line of sight of the radar. Should the effects be deemed to be unacceptable, mitigation can be provided by using the Terma Scanter wind farm-tolerant radar installed at the airport. The Ministry of Defence (MoD) has advised that any effects of the Proposed Development on military low flying would be mitigated by prior notification of the construction of the development and the provision of lighting. The effects on military low flying are therefore assessed as minor and not significant.

12.2 Introduction

12.2.1 This chapter considers the likely significant effects on aviation associated with the decommissioning of the Novar 1 Wind Farm, and the construction, operation and decommissioning of the repowered wind farm.

12.2.2 The specific objectives of the chapter are to:

- Describe the existing aviation baseline context and cumulative context;
- Describe the assessment methodology and significance criteria used in completing the impact assessment;
- Describe the potential effects, including direct, indirect and cumulative effects;
- Describe the mitigation measures proposed to address likely significant effects; and
- Assess the residual effects remaining following the implementation of mitigation.

12.2.3 The assessment has been carried out by Malcolm Spaven of Gladhouse Planning Ltd (trading as Aviatica).

12.3 Legislation, Policy and Guidance

12.3.1 The aviation assessment has been undertaken within the context of relevant legislative instruments, policies, and guidance documents, summarised below.

Legislation

- The Air Navigation Order (ANO) 2016[1]; and
- The Town and Country Planning (Safeguarded Aerodromes, Technical Sites, Meteorological Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2016[2].

Policy

- Civil Aviation Authority (CAA) Policy and Guidelines on Wind Turbines (CAP 764);[3] and

[1] UK (2016), The Air Navigation Order 2016, Statutory Instrument 2016 No. 765. London: HMSO.

[2] Scottish Government (2016), The Town and Country Planning (Safeguarded Aerodromes, Technical Sites, Meteorological Technical Sites and Military Explosives Storage Areas) (Scotland) Direction 2016. Edinburgh: Scottish Government.

[3] Civil Aviation Authority (2025), CAA Policy and Guidelines on Wind Turbines, CAP 764. Gatwick: CAA.

- CAA Policy Statement: Lighting of Onshore Wind Turbine Generators in the United Kingdom with a maximum blade tip height at or in excess of 150 m Above Ground Level (June 2017).[4]

Technical Standards and Guidance

- CAA, Air Traffic Services Safety Requirements (CAP 670);[5]
- CAA, Safeguarding of Aerodromes (CAP 738);[6]
- CAA, Implementation and Safeguarding of Instrument Flight Procedures in the UK (CAP 785B);[7]
- Scottish Government, National Planning Framework 4;[8] and
- Highland Council, Highland-wide Local Development Plan.[9]

12.4 Assessment Methodology

Overview

12.4.1 The aviation assessment methodology is detailed below and follows the principles set out in CAA guidance CAP 764.

12.4.2 The assessment is presented with reference to specific 'areas' of the Site within the application boundary. These areas comprise the Turbine Array and associated Access Route, as described in **Chapter 3: Site Description and Proposed Development (EIAR Volume 2)**.

12.4.3 Effects considered to be significant for the purposes of the EIA Regulations are those classified as being 'Major' or 'Moderate'.

Scope of Assessment

EIA Scoping Opinion

12.4.4 An EIA Scoping Report (presented in **Technical Appendix 1.4 Scoping Report (EIAR Volume 4)**) was submitted to the ECU on 23rd January 2025 with a formal request for a Scoping Opinion on the proposed scope of the EIA and assessment methodologies. The ECU subsequently issued their Scoping Opinion on the proposed scope and methodology of the topics for assessment within the EIA on 23rd May 2025. A copy of ECU's Scoping Opinion is provided in **Technical Appendix 1.5 Scoping Opinion (EIAR Volume 4)**.

12.4.5 A summary of the key points raised in the ECU's Scoping Opinion relevant to aviation, are presented in Table 12.1, including a response as to where the comments have been addressed.

Table 12.1: Summary of ECU Scoping Opinion Comments

Summary of Comment	Response or location within the EIAR where comments are addressed
The Highland Council: Applicant should provide written evidence in EIAR of consultations with aviation stakeholders.	See Table 12.2 below.

[4] Civil Aviation Authority (2017), Policy Statement: Lighting of Onshore Wind Turbine Generators in the United Kingdom with a maximum blade tip height at or in excess of 150 m Above Ground Level. Gatwick: CAA

[5] Civil Aviation Authority (2019), Air Traffic Services Safety Requirements, CAP 670. Gatwick: CAA.

[6] Civil Aviation Authority (2020), Safeguarding of Aerodromes, CAP 738. Gatwick: CAA.

[7] Civil Aviation Authority (2022), Implementation and Safeguarding of Instrument Flight Procedures in the UK, CAP 785B. Gatwick: CAA.

[8] Scottish Government (2023), National Planning Framework 4. Edinburgh: Scottish Government.

[9] The Highland Council (2012), Highland-wide Local Development Plan. Inverness: The Highland Council.

Table 12.1: Summary of ECU Scoping Opinion Comments	
Summary of Comment	**Response or location within the EIAR where comments are addressed**
The Highland Council: Applicant should have continued dialogue with HIAL over impacts on radar.	The Applicant is in ongoing discussion with HIAL concerning impacts on radar and potential mitigation.
Ministry of Defence (MoD): The application site falls within Tactical Training Area 14 within which fixed wing aircraft may operate as low as 100 feet or 30.5 metres above ground level to conduct low level flight training. The addition of turbines in this location has the potential to introduce a physical obstruction to low flying aircraft operating in the area.	Impacts on military low flying are addressed in section 12.7 of this chapter.
Highlands & Islands Airports Ltd (HIAL): HIAL request that an Aviation Impact Feasibility Study (AIFS), of the proposed development, is undertaken to understand any impact on the infrastructure and operation of Inverness Airport. The following are required to be assessed by the Applicant: • Air Traffic Control Surveillance Minimum Altitude Chart (ATCSMAC); • Instrument Flight Procedures; • Primary Surveillance Radar; • New Airspace and Instrument Flight Procedures: • Lighting Requirement	Impacts on Inverness Airport PSR and IFPs are addressed in section 12.7 of this chapter.

12.4.6 Additional engagement with aviation consultees is summarised in Table 12.2.

Table 12.2: Additional Engagement	
Consultee	**Summary of Consultations**
HIAL	Consideration of radar line of sight to turbines in revised layout; confirmation that HIAL is satisfied that only one turbine (T3) is within line of sight.
MoD	Confirmation that they are content with the proposed lighting scheme.

Potential Impacts Scoped In

12.4.7 The scope of this chapter is set out in Table 12.3. The scope of the assessment has been informed by consultation detailed in Tables 12.1 and 12.2 above.

Table 12.3: Impacts Considered within the Assessment			
Impact	**Phase***		
	C	**O/M**	**D**
Effects on Inverness Airport IFPs including ATCSMAC	X	X	X
Effects on Inverness Airport PSRs	X	X	X
Effects on low flying military aircraft	X	X	X

*C=construction, O/M=operation and maintenance and D=decommissioning.

12.4.8 The chapter assesses cumulative effects as arising from the addition of the Proposed Development to other cumulative developments. The cumulative developments list includes projects:

- Where an application for consent has been submitted to the relevant authorities but is under determination;
- Where consent has been refused but an appeal against that decision has been submitted and is under determination;
- Where there is an approved consent, but construction has yet to commence;
- Where construction has commenced; and
- That are operational.

12.4.9 The assessment is based on the Proposed Development as described in **Chapter 3: Site Description and Proposed Development (EIAR Volume 2)**.

Potential Impacts Scoped Out

12.4.10 The assessment focusses on likely significant effects and as such impacts that are not likely to result in significant effects have been scoped out of the assessment. A summary of the impacts scoped out, together with reasoning for scoping them out is presented in Table 12.4.

Table 12.4: Impacts Scoped Out of the Assessment

Impact	**Reasoning**
Effects on RAF Lossiemouth PSR	MoD scoping response does not refer to effects on RAF Lossiemouth PSR.
Effects on NATS En Route plc (NERL) PSRs	Published NERL safeguarding maps[10] show no radar coverage of the Turbine Array at 180 m above ground level (agl).
Effects on other aviation infrastructure	None within study area

Method of Baseline Characterisation

Extent of the Study Area

12.4.11 The study areas for the aviation assessment were selected using the recommended distances set out in CAA guidance (CAP 764), modified to ensure that all radars with the range to detect wind turbines are included. The distances used are radii from the closest turbine position, as follows:

- 210 km for air defence and air traffic control PSRs;
- 10 km for SSRs, aeronautical radio navigation aids and Air-Ground-Air (AGA) radio facilities;
- 60 km for aerodromes with IFPs;
- 20 km for all other licensed or certificated aerodromes;
- 10 km for unlicensed aerodromes and landing sites; and
- 25 km for Meteorological Office radars.

[10] https://www.nats.aero/our-solutions/wind-farms/ [Accessed 23/1/26].

Desk Study

12.4.12 The aviation baseline assessment was carried out by consulting the UK Aeronautical Information Publication (AIP),[11] the UK Military AIP,[12] civil and military aeronautical charts, published MoD and NERL radar coverage charts and Aviatica in-house databases of aviation infrastructure and assets. The determination of the aviation baseline has also been informed by consultation responses from aviation stakeholders.

Method of Assessment

Overview

12.4.13 The aviation assessment has followed the CAA guidance in CAP 764. Radar line of sight has been modelled using Global Mapper software supplemented with digital terrain data at an appropriate resolution. Effects on Inverness Airport IFPs will be assessed by commissioning an IFP Assessment from a CAA-Approved Procedure Design Organisation (APDO). Effects on military low flying have been assessed by reviewing the Proposed Development against airspace boundaries, existing terrain and obstacle constraints.

12.4.14 Significance criteria for assessment of impacts on aviation, unlike those for environmental effects, are not based on the sensitivity of the receptor. Further, while magnitude of impact can be determined in some circumstances, it typically does not provide a standardised metric on which to measure the significance of any effects. In this context, the significance of effects on aviation has been determined in this chapter by application of professional judgement, underpinned by consideration of the magnitude of impact (where measurable); the regulations and procedures in place for ensuring that aviation infrastructure meets required performance standards; the safeguarding policies and practices in use by specific aviation stakeholders; and the consultation responses from those stakeholders.

Cumulative assessment

12.4.15 Cumulative assessment of the impacts of the Proposed Development on aviation have been assessed by considering (a) whether other wind energy developments within line of sight of the Inverness PSR, in combination with the Proposed Development, could affect the efficacy of established radar mitigation techniques and (b) whether other wind energy developments within 10 km of the proposed turbines, in combination with the Proposed Development, could preclude vertical or horizontal avoidance manoeuvres by low flying military aircraft.

Limitations and Assumptions

12.4.16 A micrositing allowance of up to 100 m is proposed for turbines and associated infrastructure. However, for certain turbines the extent of permissible micrositing is constrained by aviation safeguarding requirements. Micrositing shall not be undertaken where a revised turbine location would result in a turbine becoming visible to the safeguarded radar system or otherwise invalidate the conclusions of the aviation assessment.

12.5 Baseline Conditions

Current Baseline

12.5.1 The proposed Turbine Array is located in uncontrolled (Class G) airspace extending from ground level to Flight Level 95 (approximately 9,500 ft above mean sea level (amsl)). Above that level is the Class E controlled airspace of the Moray Control Area (CTA), within which air traffic services are provided by NERL, mainly using radars located at Perwinnes Hill

[11] https://nats-uk.ead-it.com/cms-nats/opencms/en/Publications/AIP/ [Accessed 23/1/26].

[12] https://www.aidu.mod.uk/aip/aipVolumes.html [Accessed 23/1/26].

(148 km southeast of the wind turbine array) and Tiree (207 km southwest of the Turbine Array).

12.5.2 The Proposed Development is located in daytime military Low Flying Area (LFA) 14 and night low flying area Allocated Region 1B East (AR1BE), where fixed wing military aircraft may fly as low as 250 ft above ground level (agl). Proposed Turbines 1 and 2 are located within LFA 14(T), where fixed wing aircraft may fly as low as 100 ft agl.

12.5.3 The Proposed Development is also located within the Highlands Restricted Area (HRA), a volume of airspace that can be activated periodically for use by military aircraft flying at low level without visual reference (for example in cloud or poor visibility) by day or night. Proposed Turbines 1 and 2 are within the main body of the HRA, designated R610A, extending from ground level to 5,000 ft amsl. The remaining turbines are within a transit corridor, designated R610D, from R610A to the Tain Air Weapons Range (AWR). The R610D corridor extends from ground level to 2,000 ft amsl.

12.5.4 The Turbine Array is located 30 km northwest of Inverness Airport, which is equipped with two PSRs and has instrument arrival, departure and approach procedures for both runway directions.

12.5.5 The Turbine Array is located 64 km west of RAF Lossiemouth, which is equipped with a PSR.

12.5.6 The Turbine Array is located 158 km west of the air defence PSR at Remote Radar Head (RRH) Buchan and 178 km east of the air defence PSR at RRH Benbecula.

12.5.7 There are no other aviation assets within the Study Area.

Future Baseline

12.5.8 A proposal to introduce controlled airspace around Inverness Airport was withdrawn in July 2026. HIAL is expected to submit a new Airspace Change Proposal (ACP) for Required Navigation Performance (RNP) instrument approach procedures around Inverness Airport in due course.

Summary of Scoped in Receptors

12.5.9 A summary of the receptors considered likely to be affected by the Proposed Development and therefore scoped into the assessment are set out in Table 12.5.

Table 12.5: Summary of Scoped in Receptors

Receptor	Justification
Inverness Airport PSR	Referenced in HIAL scoping response
Inverness Airport IFPs	Referenced in HIAL scoping response
Military low flying	Referenced in MoD scoping response

12.6 Embedded Mitigation

12.6.1 Embedded mitigation includes design/standard best practice measures as described in **Chapter 3: Site Description and Proposed Development (EIAR Volume 2)** and the **Chapter 4: Design Evolution and Alternatives (EIAR Volume 2)**.

12.6.2 The assessment of likely significance effects takes the embedded mitigation into account as an integral part of the design of the Proposed Development as it would be secured in the description or conditions of the consented development.

12.6.3 A summary of the embedded and standard mitigation considered for the aviation assessment is set out in Table 12.6.

Table 12.6: Summary of Embedded Mitigation

ID	Phase*	Description	Purpose of Mitigation
Embedded Mitigation			
AV01	O	Layout design refinement.	Minimise turbine visibility to Inverness Airport PSR.
AV02	PC	Aviation safety lighting and submission of data to the MoD to ensure that structures can be accurately charted to allow deconfliction.	To ensure turbines are identifiable to military aircrew.

*PC=Pre-construction, C=construction, O=operation and maintenance and D=decommissioning.

12.7 Assessment of Likely Effects

Decommissioning of Novar 1 Wind Farm

12.7.1 Cranes used during the decommissioning of the Novar 1 Wind Farm and the construction of the repowered wind farm may pose an obstacle hazard to low flying aircraft. The locations, heights and lighting status of cranes would be pre-notified to the CAA and the MoD to make the information available to aircrew. With pre-notification and appropriate lighting in place, this would be a minor effect and therefore not significant. This effect is not discussed further in this chapter.

Construction of Proposed Wind Farm

Inverness Airport PSR

12.7.2 Potential effects on PSRs occur only when the turbine blades are rotating. These effects do not occur during the construction phase.

Inverness Airport IFPs

12.7.3 Following withdrawal of the Inverness Airport ACP in July 2026, the design of any future IFPs is not known and cannot, therefore, be assessed. Based on the design of the previously submitted IFPs, it is anticipated that any effects of the Proposed Development on Inverness Airport IFPs would be minor since they would not include SIDs, STARs or Approach Transitions (which require to be contained within controlled airspace). An IFP assessment has been commissioned by the Applicant.

Military low flying

12.7.4 The erection of tall structures during the construction phase has the potential to create additional hazards to military aircraft flying at low altitude. Two of the proposed turbines are located in LFA 14(T), whose overall designation by the MoD has historically been as a high-priority military low flying area likely to raise considerable and significant concerns in relation to wind turbine developments due to aircraft flying at less than the normal minimum of 250 ft (known as Operational Low Flying (OLF)). The remaining turbines are located in an area defined historically by the MoD as a "*regular military low flying area where*

mitigation may be necessary to resolve concerns"[13] due to its location within the R610D segment of the HRA. However, according to data published by the MoD, LFA 14(T) has not been activated since at least August 2025[14] and the HRA has not been activated since 2015.[15]

12.7.5 Further, the MoD scoping response states that any effects on military low flying would be acceptably mitigated by adding conditions to any consent requiring that proposed wind turbines with tip heights of 150 m or more are fitted with aviation safety lighting, and that sufficient data is submitted to ensure that structures can be accurately charted to allow deconfliction. These provisions are already required by Articles 222 and 225A of the Air Navigation Order 2016. It is therefore assessed that the effects of the Proposed Development on military low flying are minor and not significant.

Operation of Repowered Wind Farm

Inverness Airport PSR

12.7.6 Radar line of sight modelling has determined that Turbine 3 would be within line of sight of the Inverness Airport STAR 2000 PSR. HIAL has confirmed that the line of sight to all other turbines in the Proposed Development would be blocked by intervening terrain.

12.7.7 The STAR 2000 is a plot-extracted radar in which data processors assess whether a particular object detected by the radar is a genuine aircraft target as opposed to 'clutter' generated by non-aircraft objects such as road and rail traffic, precipitation, birds or wind turbines by recording multiple attributes of the radar return over at least three consecutive sweeps of the radar antenna. A 'plot' deemed to be an aircraft target is only presented on the controller's display if it meets those criteria on at least three consecutive sweeps of the radar. A single object, such as in this case Turbine 3 of the Proposed Development, is relatively unlikely to be deemed to be a valid target by the radar data processors because it would display no movement of its location between one radar sweep and the next.

12.7.8 In the unlikely event that Turbine 3 is displayed to radar controllers as a valid target, the consequences of this for provision of air traffic services by Inverness ATC would depend on the flight rules under which the aircraft is operating, its altitude, and the type of air traffic service it is receiving. All commercial IFR traffic operating inside the Moray CTA would be in receipt of a radar control service. For these aircraft the Manual of Air Traffic Services Part 1 advises that "*Controllers should consider the extent of the clutter and if necessary, take the following actions:*

(1) The controller may vector the aircraft around the clutter; however, this might not be practicable due to traffic density, airspace availability and/or the requirement to follow specific arrival or departure tracks.

(2) If the intensity of the clutter is such that the controller is not able to clearly see the aircraft's PSR or SSR position symbol, radar separation shall not be used to separate it and other controlled aircraft.

(3) The controller may provide IFR traffic in Class E airspace with reduced traffic information."[16]

12.7.9 For VFR traffic in receipt of a Traffic Service, whether inside or outside controlled airspace, or a Deconfliction Service outside controlled airspace, the Manual of Air Traffic Services Part 1 advises that "*controllers should consider the extent of the clutter and if necessary, take the following actions:*

[13] Ministry of Defence, Defence Infrastructure Organisation, Low Flying Consultation Zones, Map Reference DE090071, Version 007, 7 October 2011.

[14] https://www.gov.uk/government/publications/operational-low-flying-training-timetable

[15] Ministry of Defence, Freedom of Information Act response ref FOI2023/10135, 19 September 2023.

[16] Civil Aviation Authority (2025), Manual of Air Traffic Services - Part 1, CAP 493, Section 1: Chapter 6, paragraph 18C.1. Gatwick: CAA.

(1) For aircraft in receipt of a Deconfliction Service or a Traffic Service, controllers should inform the pilot of the extent of the clutter and where practicable offer a reroute. However, this may not be possible due to traffic density, airspace availability and/or the requirement to follow specific arrival or departure tracks. The extent of such a reroute should where possible aim to achieve the planned lateral deconfliction minima from the observed clutter. However, it may still be necessary to reduce traffic information, and if applicable deconfliction advice, from the direction of the clutter as detailed within CAP 774 – UK Flight Information Services.

(2) For aircraft in receipt of a Traffic Service, and those aircraft under a Deconfliction Service that are not rerouted as above, controllers shall inform pilots of a reduction in traffic information/deconfliction advice as detailed within CAP 774 – UK Flight Information Services. If the controller cannot maintain aircraft identity, the service shall be terminated."[17]

12.7.10 It is considered that the low probability of Turbine 3 in the Proposed Development appearing as a return on the Inverness radar display would result in controllers deeming that the dimensional and temporal extent of the clutter does not require them to take further action. Therefore, it is concluded that the effects of the Proposed Development on the Inverness Airport Thales STAR 2000 PSR would not be significant.

Inverness Airport IFPs

12.7.11 Any assessed effects of the Proposed Development on Inverness Airport IFPs identified in the pre-construction phase would require to have been mitigated prior to construction. Therefore, during the operational phase, the Proposed Development would have no impacts on Inverness Airport IFPs.

Military low flying

12.7.12 The effects of the Proposed Development on military low flying during the operational phase would be the same as those during the construction phase i.e., minor and not significant.

Decommissioning of Proposed Wind Farm

Inverness Airport PSR

12.7.13 The effects of the Proposed Development on the Inverness Airport PSRs during the decommissioning phase would be the same as those during the construction phase.

Inverness Airport IFPs

12.7.14 Any assessed effects of the Proposed Development on Inverness Airport IFPs identified in the pre-construction phase would require to have been mitigated prior to construction. Therefore, during the decommissioning phase, the Proposed Development would have no impacts on Inverness Airport IFPs.

Military low flying

12.7.15 The effects of the Proposed Development on military low flying during the decommissioning phase would be the same as those during the construction phase.

Potential Cumulative Effects

Inverness Airport PSR

12.7.16 Radar line of sight modelling has determined that the Inverness Airport STAR 2000 PSR has line of sight to turbines in the operational Beinn Tharsuinn and Fairburn wind farms and the proposed Beinn Tharsuinn Extension/Repower, Fairburn Extension, Carn Fearna, Tarvie and Abhainn Dubh wind farms. It is understood that the radar-visible turbines in the Beinn

[17] Civil Aviation Authority (2025), Manual of Air Traffic Services - Part 1, CAP 493, Section 1: Chapter 6, paragraph 18B.1. Gatwick: CAA.

Tharsuinn and Fairburn wind farms, which were already operational at the time of first commissioning of the Inverness PSR in 2008, appear on the radar display only occasionally and their effects are deemed operationally acceptable. All the proposed radar-visible wind farms are expected to be subject to a mitigation agreement requiring use of the Terma Scanter 4002 PSR at Inverness as in-fill. It is expected that this would reduce the effects of those wind farms to a negligible, and therefore not significant, level. Since the stand-alone effects of the single visible turbine in the Proposed Development are assessed as not being significant, it is concluded that the cumulative effects of the Proposed Development on the Inverness Airport PSR would also be not significant.

12.7.17 In the event that HIAL determines that the stand-alone or cumulative impacts of the Proposed Development on the Inverness Airport PSR are not acceptable, mitigation is available by use of the Terma Scanter 4002 PSR at Inverness Airport.

Inverness Airport IFPs

12.7.18 Cumulative effects on IFPs are always driven by the height above mean sea level (amsl) of the tallest structure in a particular area. Thus, if the highest turbine in the Proposed Development (Turbine 3, with blade tips 793.3 m amsl) is the tallest of all structures considered in the cumulative assessment, then the cumulative impact of the Proposed Development is the same as its stand-alone impact. If, however, any other development is taller than Turbine 3 of the Proposed Development, then the cumulative impact of the Proposed Development is nil, since the entire impact on Inverness Airport IFPs is driven by the other, taller development.

12.7.19 The effects of the Proposed Development on Inverness Airport IFPs would be determined by an IFP assessment, which has been commissioned by the Applicant. In the event this concludes that the Proposed Development has effects on Inverness Airport IFPs, a cumulative assessment would be undertaken to determine whether those effects would be nullified by cumulative developments with higher structures.

Military low flying

12.7.20 The cumulative impact of the Proposed Development on military low flying has been assessed by reviewing MoD responses to other wind farm developments located in LFA14(T), R610A and R610D. This assessment has found that all other such developments have elicited an MoD response identical to that received in relation to the Proposed Development, that is, effects on military low flying would be acceptably mitigated by the pre-construction provision of information on the development and by the fitting of lights to the turbines. It has therefore been concluded that the cumulative impact of the Proposed Development on military low flying would not be significant.

12.8 Additional Mitigation and Enhancement Measures

12.8.1 HIAL has installed a Terma Scanter 4002 wind farm-tolerant radar at Inverness Airport to mitigate the effects of wind farms on its Thales STAR 2000 PSR. In the event that HIAL determines that the effect of a single turbine in the Proposed Development on the Inverness Airport STAR 2000 PSR is unacceptable, the Applicant would enter into a commercial agreement with HIAL to implement mitigation consisting of blanking of the STAR 2000 in the airspace over the wind farm and use of the data from the Terma Scanter 4002 radar as 'in-fill'. This would be secured by means of a suspensive planning condition.

12.8.2 A summary of the additional mitigation is set out in Table 12.7.

Table 12.7: Summary of Additional Mitigation					
Description of impact	**ID**	**Description of mitigation**	**Purpose of mitigation**	**Timing of mitigation***	**Consultation or approval required**
Clutter and reduced probability of detection on Inverness Airport Thales STAR 2000 radar	AV03	Blanking of STAR 2000 radar and in-fill using data from Inverness Airport Terma Scanter 4002 radar	Eliminate impact on STAR 2000 radar	Pre-commissioning	Approval by HIAL

*PC=Pre-construction, C=Construction, O=operation and maintenance and D=decommissioning.

12.9 Significant Residual Effects

12.9.1 Since all significant impacts of the Proposed Development on aviation must be mitigated in agreement with relevant stakeholders and with approval from the CAA in accordance with national and international regulatory provisions, and from the MoD, there would be no significant residual effects on aviation.

12.10 Monitoring

12.10.1 Since no significant residual effects on aviation are predicted, no monitoring is required.