

FARNBOROUGH AIRPORT: FLIGHTPATH 2040

Non-Technical Summary

Environmental Statement Volume III

November 2023

FARNBOROUGH AIRPORT

FARNBOROUGH AIRPORT

Farnborough Airport is a business aviation airport located to the south west of Farnborough town centre, within the Borough of Rushmoor. The Airport is owned and operated by Farnborough Airport Limited.

Farnborough Airport was the first operational airfield in the country, dating to 1904. It was used for aviation research and development until the 1990s when it was declared surplus to requirements by the Ministry of Defence (MoD).

Planning Permission was granted in 2000 for the change of use of the aerodrome for business aviation.



Farnborough Airport's current operations are managed under an existing planning permission (Ref. 20/00871/REVPP). This includes various restrictions on operations, including stipulating the number of aircraft movements permitted per year, the hours and days of operation, and the maximum take-off weight of each aircraft.

Farnborough Airport Limited (the Applicant) is seeking to change the conditions set out within the existing planning permission. The changes sought to the existing planning conditions are termed 'the Proposal'.

To agree these changes the Applicant has submitted a Section 73 application under the Town and Country Planning Act 1990 (as amended). A Section 73 application is an application which is submitted to a local planning authority to request changes to an existing planning permission. In this case, the local planning authority is Rushmoor Borough Council (RBC).

The Section 73 application requests that the number of permitted aircraft movements per year be increased. The application also requests an amendment to the number of aircraft allowed over a certain weight. No new buildings or infrastructure, changes to buildings or infrastructure nor demolition is proposed through the Section 73 application.

An Environmental Statement (ES) has been prepared for the Section 73 application documenting the likely significant effects of the Proposal and where necessary, any requirement for mitigation, drawing on consultation with consultees and the local community.

THE ENVIRONMENTAL IMPACT ASSESSMENT

The term 'Environmental Impact Assessment' (EIA) describes a procedure that must be followed for certain types of projects before they can be given planning permission. The procedure is a means of assessing, in a systematic way, a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects and the scope for reducing them are properly understood by the public and the relevant competent authority before it makes its decision.

For the Proposal, the requirements in relation to EIA are set out in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) ("The EIA Regulations").

The EIA Regulations outline the types of development which must always be subject to an EIA (Schedule 1 development) and other developments which may require an assessment if they give rise to likely significant environmental effects (Schedule 2 development). The Applicant has opted to undertake an EIA as the Proposal is a Schedule 2 development considered likely to give rise to significant effects.

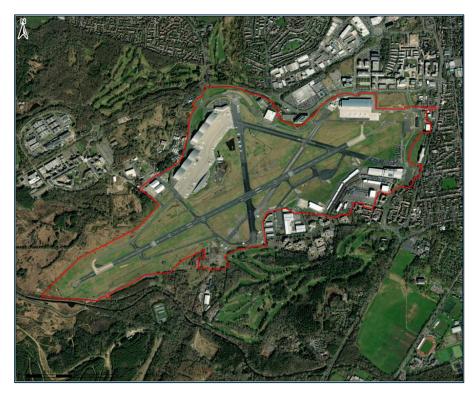
The Applicant has appointed several consultants to help with undertaking the EIA. WSP UK Limited (WSP), Bickerdike Allen Partners LLP (BAP), Ricardo and York Aviation LLP (York Aviation) have been commissioned as suitable experts in the environmental assessment of airports.

The EIA process is documented in an ES. The ES for this Proposal has been separated into three volumes:

 Volume 1 Main Report: providing the detailed assessment work;

- Volume 2: Appendices providing more detailed information to support the Main Report such as detailed methodologies, assessments and maps; and
- Volume 3: Non-Technical Summary (NTS) (This Document).

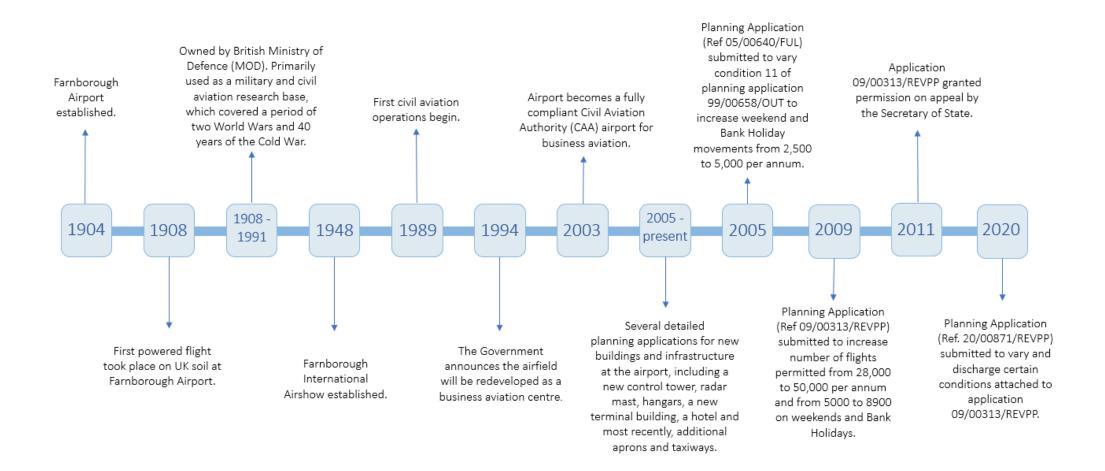
The NTS is designed to provide a digestible summary of the ES in non-technical language, as required by the EIA Regulations. The NTS provides a concise overview of the Proposal, the likely significant effects identified by the EIA and the mitigation measures that will be implemented to reduce any likely significant effects where possible. The reader should refer to Volumes 1 and 2 should more detailed information be needed.



PLANNING CONTEXT AND HISTORY

The timeline below presents key events throughout the history of Farnborough Airport since its establishment in 1904. In addition, the timeline also shows a summary of recent planning permissions granted at the Airport.

The key policy document in relation to growth at the Airport is RBC's Local Plan (2019). Strategic Policy SP4 covers the growth of the airport and sets requirements in relation to demonstrating the need for growth, noise, safety, air quality and odour, economic benefits, noise, hours of operation, nature conservation and surface water.



SITE DESCRIPTION

The Airport (termed 'the Site') is approximately 239 hectares (ha) in area. The Airport is located south west of the town of Farnborough.

The image on the next page shows the layout of the Airport with the implementation of approved planning applications. As illustrated, the Site largely consists of a grassland and concreted areas (single main runway, taxiways and aircraft stands). Surrounding these there are also car parks, a large modern terminal building, several large aircraft hangars, an air traffic control tower, a fire station, a public house, and a hotel.

The Site is relatively flat and lies in a semi-rural setting. It is bordered by a mixture of heathland, grassland and woodland to the northwest, west and south, with urban development to the north and east. The Site can be accessed by the A325 to the east, Aerospace Boulevard to the south and the A323 (Fleet Road), Ively Road and Old Ively Road to the west. These roads also serve nearby commercial and retail properties including Farnborough Business Park.

The Airport is located near key transport links including the A331 (Blackwater to Runfold dual carriageway), the M3 (Sunbury-on-Thames to Eastleigh motorway) and Farnborough train station. A number of Public Rights of Way (PRoW) and footpaths are also situated close to the Site, with several being located within 1km.

Two European sites are located within 10km of the Site. These are the Thames Basin Heaths Special Protection Area (SPA) adjacent to the Site and Thursley, Ash, Pirbright and Chobham Special Area of Conservation (SAC), 2.71km from the Site.

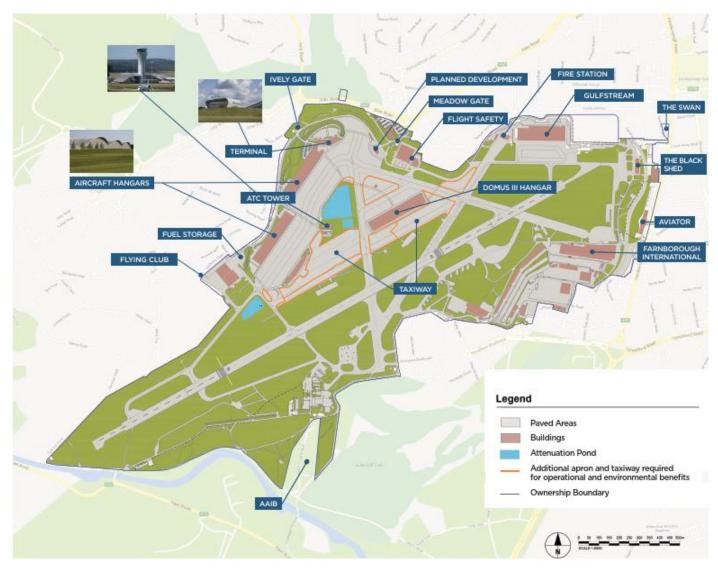
The Site is partially located within the Eelmoor Marsh Site of Special Scientific Interest (SSSI) and is adjacent to Basingstoke Canal SSSI which sits to the west. Bourley and Long Valley SSSIs are 0.75km south west from the Site and Snaky Lane local nature reserve located 1.84km to the east. Large areas of grassland within the Site are designated as the Farnborough Airport Site of Importance for Nature Conservation (SINC). These are designated as Habitats of Principal Importance (HPI) owing to their characteristics of lowland dry acid grassland, lowland heathland, purple moor grass and rush pasture and lowland meadow. Two parcels of Ancient Woodland are also present within 2km of the Site. These are Outridden Copse and Bickley Copse which are approximately 1,950m and 1,700m south west of the Site respectively.

There are two Air Quality Management Areas (AQMA) located within the vicinity of the Airport. The closest AQMA is approximately 4.3km to the north-east along the M3. The other is in Farnham approximately 6.4km to the south of the Airport.

Designated historic buildings within the Site are the G29 Building or 'Black Shed' and the Swan Inn. The G29 Building is located immediately to the west of Trenchard Way, was constructed by the Royal Flying Corps in 1913 and is listed at Grade II. The Swan Inn is located on Farnborough Road and is locally listed as an 'important local landmark.'

Although a significant majority of the Site is located in Flood Zone 1, land which has a less than 1 in 1,000 annual probability of river or sea flooding, a small portion of the northern area of the Airport lies within Flood Zone 3 where there is 'a high probability of fluvial flooding'.





Layout of the Airport within its ownership boundary including the implementation of approved planning applications.

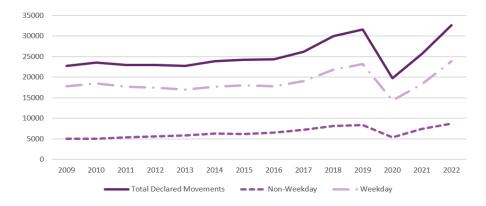
CURRENT AND PROPOSED OPERATIONS

Current operations

Flying activity at Farnborough is restricted by the planning conditions which impose constraints on its operation. Restrictions have been imposed on operating hours, the type and weight of the aircraft and types of flying activities. For example, scheduled passenger services and bulk freight services are not permitted.

Farnborough Airport flight operations occur between 07:00 and 22:00 Monday to Friday and between 08:00 and 20:00 on weekends and public holidays. Ground based operations such as aircraft maintenance is also only permitted to occur between these times. The Airport is fully closed on 25 December and 26 December.

The existing planning permission permits the Airport to have 50,000 aircraft movements per year. Aside from COVID-19 related disruptions, as seen in the drop in 2020, the graphic below shows that annual aircraft movements have gradually risen from 22,779 in 2009 to 32,598 in 2022.



The aircraft fleet in use at the Airport is very broad containing over 400 different aircraft types. The aircraft includes a wide range of sizes from very light jets up a limited number of larger aircraft, as well as a similar spectrum of helicopter types, with the fleet varying year to year. Planning restrictions prevent the majority of commercial airliners such as Boeing 747 or 737 Max.

The Site is lit using a combination of column and building mounted lighting. Lighting can be found on site buildings, internal site roadways, runways and column mounted floodlighting which provides light to the aprons.

Apron and runway lighting is switched off overnight when these areas are not in use. Security lighting throughout the Site remains on overnight but is largely activated by movement sensors. Lighting to Site buildings is controlled separately, with some buildings remaining switched on overnight.

Future operations

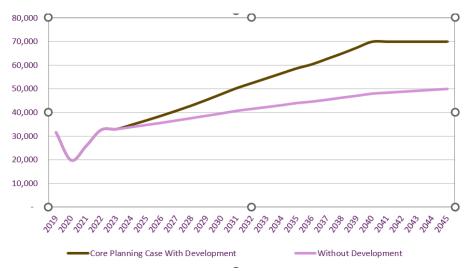
The Airport is to undergo further development to its buildings, aprons and parking areas over the coming years by implementing existing planning permissions approved by RBC. Details of these permissions is available in **Chapter 4: Legislation, policy and planning history** (**Section 4.6**) in **Volume I** of the ES.

These developments do not form part of the Proposal and are not required to achieve the aims of the Proposal but they form part of the wider aim to improve operational efficency. Proposed developments include additional buildings, hardstanding for aircraft movement and parking, and energy efficiency and decarbonisation improvements aimed at achieving Net Zero.

THE PROPOSAL

The Applicant is proposing to amend existing operational constraints imposed by planning conditions on permission 20/00871/REVPP and to remove discharged conditions attached to planning permission Ref 09/00313/REVPP. The Applicant seeks only to amend operational restrictions placed by these permissions. No new buildings of infrastructure, nor amendments to the existing infrastructure or buildings is proposed.

The Proposal will enable the Applicant to meet the long-term market demand for flights from the Airport and also achieve wider aims such as safeguarding local employment, securing UK business aviation connectivity and offering economic opportunity to the region in the future. The images below compares the annual aircraft movement projections of the 'with Proposal' (in black) in comparison to the 'without the Proposal' (in pink).



As a result, a Section 73 application proposes the following amendments to the existing planning conditions:

AMENDMENT TO CONDITION 2

Current wording:

"No more than a total of 50,000 aircraft movements per annum shall take place, of which no more than 8,900 movements shall be at weekends and Bank Holidays. Furthermore, no more than 270 of the 1,500 aircraft movements per annum between 50,000 and 80,000 Kg, permitted by condition 6, shall take off or land at weekends and Bank Holidays."

Proposed wording:

No more than a total of 70,000 aircraft movements per annum shall take place, of which no more than 18,900 movements shall be at weekends and Bank Holidays. Furthermore, no more than 570 of the 2,100 aircraft movements per annum between 55,000 and 80,000 Kg, permitted by condition 6, shall take off or land at weekends and Bank Holidays."

AMENDMENT TO CONDITION 6

Current wording:

With the exception of up to 1,500 movements per annum by aircraft not exceeding 80,000 Kg maximum take-off weight, no aircraft exceeding 50,000 Kg maximum take-off weight and no helicopters exceeding 10,000 Kg maximum take-off weight shall take-off or land at the Aerodrome pursuant to this permission."

Proposed wording:

"With the exception of up to 2,100 movements per annum by aircraft not exceeding 80,000 Kg maximum take-off weight, no aircraft exceeding 55,000 Kg maximum take-off weight and no helicopters exceeding 10,000 Kg maximum take-off weight shall take-off or land at the Aerodrome pursuant to this permission."

AMENDMENT TO CONDITIONS 7 AND 8

Current wording:

Condition 7: No flying pursuant to this permission shall take place if the 1:10,000 per annum risk contour at either end of runway 06/24 extends to areas where people live, work or congregate.

Condition 8: All flying pursuant to this permission shall conform to the agreed 1:100,000 per annum risk contour. For the avoidance of doubt, the currently approved plans are: GN TG A OP 1582 rev A; GN TG A OP 1583 rev A; and GN TG A OP 1588 rev A.

Proposed wording:

The Airport will submit the PSRZ [Public Safety Restricted Zone] and PSCZ [Public Safety Controlled Zone] maps, in accordance with DfT policy issued October 2021, to the local planning authorities whose areas are affected by them, and shall update such maps within 3 months of any updates being published by the DfT.

Applicant's response to consultation

In response to comments received through six public consultation events throughout September 2023, mailshots and social media the Applicant has made several changes to the proposals that were consulted upon and set out in the EIA Scoping Report. These include:

- 1. Removing the intention to amend Condition 3 to extend flying hours on non-weekdays from 08.00 20.00 to 07.00 21.00.
- An annual cap is proposed to reassure residents on the annual rate by which the proposed annual aircraft movements would be realised. Increased contributions to the proposed new Sustainability Fund.
- 3. Expansion of the Sound Insultation Grant Scheme from the existing 60 dB Annual Day limit to the 55 dB Summer Day limit.
- 4. Creation of a new Noise Levy to incentivise quieter aircraft in the future.
- 5. The Piaggio aircraft type will phased out by the Airport in response to concerns over its perceived noise disturbance.



FARNBOROUGH AIRPORT

APPROACH TO EIA

A scoping study was carried out to determine the environmental effects to be assessed in the EIA. This was based on desk-based information, site surveys and review of previous environmental assessments undertaken in relation to the growth of Farnborough Airport.

The scoping study was documented in a Scoping Report which described the intended scope of the EIA based on the disciplines likely to give rise to significant environmental effects. These were identified as Socio-Economics, Air Quality, Noise, Climate Change, and Biodiversity, along with any impacts of these factors in combination. The Scoping Report described disciplines which were to be scoped out of the EIA as they were unlikely to give rise to significant effects.

The Scoping Report was submitted to RBC on 5 September 2023. RBC provided its Scoping Opinion on 19 October 2023. The EIA has considered and addressed the requirements of the Scoping Opinion, including adding traffic and transport into the ES. The EIA has been informed by consultation with statutory and non-statutory consultees, as well as the local community through public consultation undertaken by the Applicant and statutory consultation undertaken by RBC as part of the scoping process. The Applicant has responded positively to the consultation through the amendments to the Proposal summarised on the previous page, while the ES has sought to provide the requested information to explain the likely significant effects of the Proposal.

An EIA needs to assess the likely significant effects of a project in comparison with what would happen should the project not proceed. The EIA has compared likely environmental conditions between a 'without development' scenario and a 'with development' scenario.

Owing to the nature of the Proposal, the Applicant has not identified any reasonable alternatives which would achieve their overarching objective of making best use of the existing runway to accommodate the predicted growth in the business aviation market.

The 'without' and 'with development' scenarios have been informed by projections of growth in airport operations and how the fleet of aircraft using the Airport will change over time. The without development scenario allows for the consented growth of the Airport to 50,000 annual aircraft movements. Assessments have been undertaken across multiple assessment years. A Principal Assessment Year of 2045 was identified as this is the year that the Airport is predicted to reach its current cap of 50,000 annual aircraft movements without the Proposal. Interim Assessment Years have also been considered as required for each discipline to comply with discipline specific guidance and to ensure that the EIA has assessed the likely worst case effects.

The significance of effects has been determined through consideration of the size of an impact, the sensitivity or importance of an affected receptor and the likelihood of an effect occurring. Effects have been classified as beneficial or adverse and negligible, minor, moderate, major or substantial. Effects of moderate impact and above are considered to be significant and material in determining the application. If and where significant effects are identified, mitigation is established and documented to ensure the effects of the Proposal are minimised.

Assessment has also been undertaken of the likely significant cumulative effects. This included the cumulative effects from different disciplines affecting a particular receptor and the cumulative effect with developments planned in the local area. The approach was agreed with RBC and exceeds legal requirements by including planning applications and policy allocations that have yet to receive planning permission. The following sections summarise the specific impact assessments that have been undertaken, explaining their key conclusions.

SOCIO-ECONOMICS

The socio-economic assessment assessed the likely significant effects of the Proposal on employment and the economy. The economic effects were assessed through gross value added (GVA) impacts (direct, indirect and induced) and the catalytic impact on the wider UK economy.

The assessment considered these effects at varying geographic scales:

Rushmoor: The Applicant's immediate geographical area;

Local: Local boroughs of Rushmoor, Hart and Surrey Heath where the vast majority of Farnborough Airport employees live, and a large proportion of their supply chain activities take place. This is known as the Local Impact Area; and

Regional: The wider area including London and the South East of England, as these are a significant source of demand for aircraft movements at Farnborough Airport.

These have been assessed against two scenarios:

- With Development: where the Airport is expected to reach 50,000 annual aircraft movements by 2031 and 70,000 movements by 2040 if the Proposal was to be implemented; and
- Without Development: where the Airport is expected to reach 50,000 movements by 2045 if the Proposal was not implemented.

The likely significant operational effects of the Proposal within these years were calculated by considering its impact on the following:

- Jobs that would be directly created from the Proposal;
- Direct GVA impacts in the local area and indirect GVA impacts within the Airport's supply chain;

- Future impacts on employment; and
- GVA and wider impacts within Rushmoor, local and regional areas.

Data for the assessment was obtained from various sources, principally staff records informed data supplied by Farnborough Airport and multiple datasets from the Office for National Statistics.

The assessment concluded that the Proposal would have majorly beneficial (significant) effects on employment in and the economy in Rushmoor and a medium beneficial (significant) effect on the Local Impact Area. The Proposal will lead to an additional GVA contribution of around £70 million in 2031 and £150 million in 2045. The additional employment supported by the Applicant with the Proposal is estimated to be around 250 jobs in 2031 and 450 jobs in 2045.

The Proposal would also promote education and skills training initiatives sponsored by the Applicant, and its tenant companies. The Applicant has committed to developing an Employment and Skills Plan as part of the Planning Application. Proportionally there would be an insignificant effect on operational and wider employment in London and the South East of England, although £220million of GVA and 950 jobs would be incrementally generated.

These conclusions outline that the economic impacts across the three study areas are positive and beneficial to the economy. The implementation of the Proposal would not therefore require any mitigation in this context.

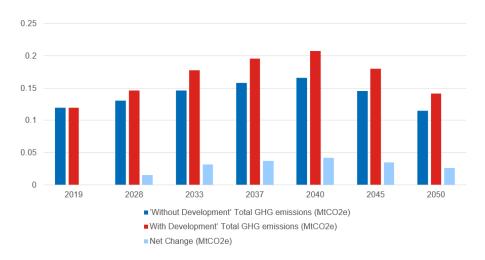
CLIMATE CHANGE

The climate change assessment reported the likely effects arising from the Proposal upon Greenhouse Gases (GHGs) and the likely effects associated with the Climate Change Resilience (CCR) of the Proposal.

GHG assessment

The GHG assessment compared the net carbon emissions resulting from the Proposal with the national, regional and local carbon budgets and against the UK's Jet Zero target of achieving net zero carbon emissions by 2050. Alongside the Proposal, the Airport is also committed to reducing emissions through increasing the use of Sustainable Aviation Fuels (SAFs) to 50% by 2050, introduction of operational efficiencies and the installation of Solar Photovoltaics.

The graphic below presents a summary of the predicted total GHG emissions 'With Development' and 'Without Development'.



The assessment concluded that the Proposal is in line with measures necessary to achieve the UK's trajectory towards net zero in all assessment years, and effects were therefore determined to be 'minor adverse' and 'not significant'. As a result, no further mitigation was required.

Climate change resilience assessment

The climate change resilience assessment followed a five-step process which included:

- Step 1: identify vulnerable receptors (i.e., receptors within the Site such as Airport infrastructure and Airport personnel or customers, and people, infrastructure, habitats and species outside of the site boundary);
- Step 2: identify existing mitigation measures;
- Step 3: identify potential impacts of climate change on receptors and embed mitigation;
- Step 4: identify and determine magnitude of effects on vulnerable receptors; and
- Step 5: develop additional mitigation measures.

Step 3 identified that future climate change scenarios gave rise to potential impacts related to extreme heat events, extreme temperatures, hazardous weather conditions and surface water flooding that may to some degree affect the operations of the Airport with the Proposal.

The assessment concluded that there are no likely significant effects and as such no additional mitigation measures, beyond proposed operational measures, are required as a result of the Proposal.

AIR QUALITY

The air quality assessment reported the likely effects arising from the Proposal in relation to air quality. With the following potentially significant effects scoped in for consideration:

- Exhaust emissions and brake and tyre wear from aircraft movements;
- Exhaust emissions from airside activities e.g. Ground Support Equipment (GSE), Auxiliary Power Units (APU), emergency vehicles;
- Exhaust emissions and brake and tyre wear from Proposalrelated traffic on the local road network; and
- Odours from aircraft movements and airside activities.

The assessment considered impacts on human and ecological receptors from exposure to air pollution. For humans, exposure was assessed in ambient air (non-contaminated atmospheric air) in publicly accessible areas within and outside of the Airport boundary, with a focus on the façades of existing residential properties and schools, and nearby Air Quality Management Areas. The significance of the resulting effects on human health and amenity were reported in the 'Air Quality' Chapter 8. For ecological receptors, air quality impact was considered on sites designated for nature conservation and the assessment of these effects was reported in the 'Biodiversity' Chapter.

To capture air-related road traffic impacts resulting from the Proposal, a study area covering a radius up to 5km from the site boundary was assessed with an additional 200m wide corridor either side of the affected roads. For impacts related to the operation of aircraft and on-site supporting infrastructure, the study area covered a radius of:

- 10km from the site boundary for human health and internationally designated ecological sites (for example, Special Areas of Conservation (SACs)); and
- 2km from the site boundary for national and local designated ecological sites (for example, Sites of Special Scientific Interest (SSSIs)).

In order to quantify the impact of the Proposal on pollutant concentrations, separate modelling of emissions from the local road network and Airport (including aircraft movements up to 3,000 feet) was undertaken. Models of different scenarios (for example, with the Proposal and without the Proposal) were developed to ensure "worse case" scenario impacts were captured. A significance criteria was then used to determine whether any average concentration levels of pollutants reached a level considered to be 'Moderate' or 'Substantial' and therefore significant.

The results of the assessment concluded that the implementation of the Proposal would cause no significant effects on human health from changes to nitrogen dioxide (NO₂) or particulate matter concentrations. Further to this it is unlikely that the Proposal will result in any nuisance. The assessment also identified that the Proposal will not have a significant effect on odour.

It was also determined that no additional mitigation is required, however, the Applicant is committed to offer the use of increasing the use of SAFs to 50% by 2050 and electrifying ground operation where possible and these should limit the impacts of the Proposal.

NOISE AND VIBRATION

The noise and vibration assessment reported the likely effects arising from the Proposal in relation to air noise (flights into and out of the Airport) and ground noise (aircraft operations at the Airport). Impacts from vibration were anticipated to be minimal, given the proximity of receptors and the nature of aircraft operating at the Airport, and so both vibration impacts and road traffic noise were scoped out of the assessment as significant effects are unlikely.

The main source of noise from an Airport is air noise. It is considered to have the potential to cause significant effects, for example irritation to sensitive receptors in proximity to the airport flight paths, with the potential for health impacts to those affected.

The assessment considered the effects of the Proposal on homes, schools, long-term healthcare facilities, and outdoor amenity areas, while taking into account the proposed extension of the Airport's Sound Insulation Scheme which is expected to benefit over 2,200 people to support improved glazing and other noise reduction measures. Consideration was also given to the noise budget for the Airport, this budget constrains the overall level of air noise the Airport is allowed to make. The Airport currently produces noise contours twice a year to check compliance with its air noise budget. These are available to view on RBC's website: https://www.rushmoor.gov.uk/planning-and-building-control/farnborough-airport/airport-monitoring/.

A series of adverse effect levels were used as the basis for assessing health effects and quality of life, starting with the LOAEL (lowest observed adverse effect level), moving to the SOAEL (significant observed adverse effect level), and finishing at the UAEL (unacceptable adverse effect level). Where a receptor experiences noise levels that reach a SOAEL and above, the effect is potentially more significant in EIA terms.

The assessment considered a standard summer day, including weekdays and non weekdays, and determined that increases in both air and ground noise with the Proposal are small and do not result in any residential property being exposed to a level above which significant adverse effects on health and quality of life occur.

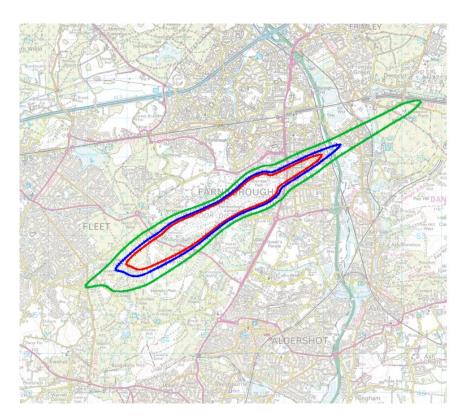
Considering the non-residential receptors, there are a number that exceed threshold levels for effects, but in all cases the increase in noise due to the Proposal is small and therefore not significant.

A summer non-weekday assessment has also been undertaken. This finds there are increases in air and ground noise with the Proposal, and that for a number of residential properties these are sufficient to be considered significant moderate effects. This is despite the absolute noise levels remaining lower than during the week and no residential property being exposed to a level above which significant adverse effects on health and quality of life occur.

For ground noise the number of affected properties is low. For air noise there are noticeably more, although a many of these will benefit from the enhanced sound insulation scheme. The eligibility for this is more generous than any other UK airport scheme and will benefit residents both on non-weekdays and during the week.

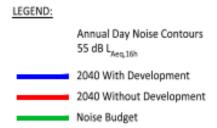
There are a number of non-residential receptors that exceed threshold levels. For the healthcare facilities the increase in noise due to the Proposal is small, and for the amenity areas the extent of the effect is limited, therefore both are not significant.

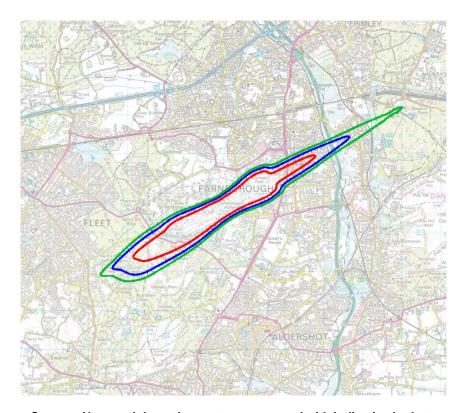
The noise budget defines the overall amount of noise the Airport is allowed to make. The Proposal has been considered in the context of the existing noise budget and indicative noise budgets for the summer day and summer non-weekday. The Proposal remains well within the noise budgets, with overall noise, and overall non-weekday noise, being less than the Airport is already allowed to do.



Annual day noise contour compared with Indicative budget







Summer Non-weekday noise contour compared with Indicative budget

BIODIVERSITY

The biodiversity assessment reported the likely effects arising from the Proposal upon biodiversity. With the following potentially significant effects scoped in for consideration:

- Effects of noise disturbance on important ecological features;
- Effects of air pollution on important ecological features and their supporting habitats.

Comprehensive ecological baseline information was collected through desktop study and field survey, following recognised methodologies. The data was analysed to identify the important ecological features within appropriate Zones of Influence (ZOIs). The ZOIs covered areas where ecological features might be subject to impacts caused by the Proposal.

The assessment included modelling of areas under which irregular, infrequent, unpredictable or loud noise of long duration, at a peak of 85 dB or above could be expected to be heard at least once per day on average (assessed as the level over which the qualifying birds of the Thames Basin Heaths SPA would likely be disturbed). The assessment showed there was no discernible difference in the area affected between the 'With Development' scenario at interim assessment year 2031 (the year when the highest noise impact was predicted) and the current state of the environment as recorded in 2022. After 2031, it is anticipated the impact will decrease due to predicted improvements in aircraft noise levels.

As such, it was concluded that there will be no disturbance to important ecological features from noise as a result of the Proposal and the significance of the potential impact is therefore negligible.

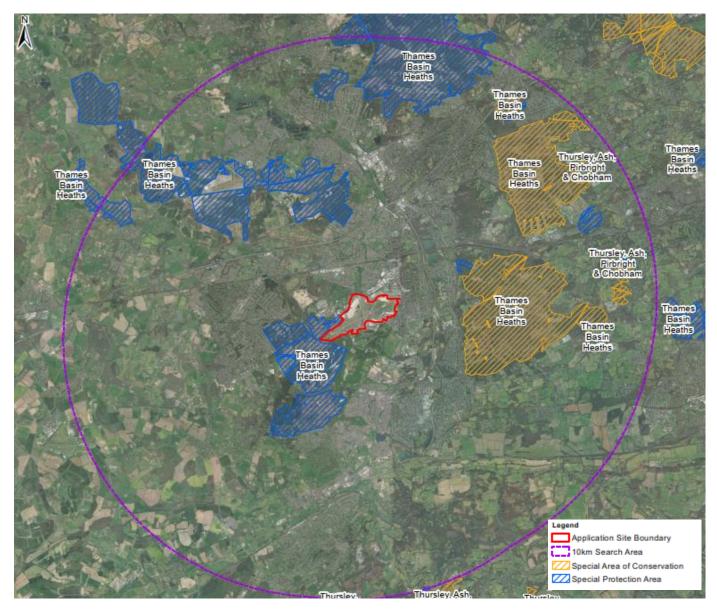
Modelling of the impact of Nitrogen Deposition and oxides of nitrogen (NOx) concentrations on important ecological features as a result of the Proposal were also undertaken. It was concluded that the Proposal will not have a likely significant effect on the important ecological features as a result of traffic-generated pollution.

The NOx Critical Level is currently not exceeded in any of the ecologically-significant areas and will not be exceeded as a result of the Proposal. The impact on NOx levels as a result of the Proposal alone remains under 1% of the Critical Level for all ecologically-significant areas with the exception of Farnborough Airfield SINC and 0.3 hectares of Eelmoor Marsh SSSI.

It was found that in both the 'With' and 'Without' development scenarios the Critical Load for Nitrogen Deposition for each important ecological feature is exceeded. The impact on Nitrogen Deposition from the Proposal is less than 1% of the Critical Load on all important ecological features, except for Eelmoor Marsh SSSI and Farnborough Airport SINC which slightly exceed 1%.

However, the affected area of Eelmoor Marsh SSSI and the SINC parcels are strictly managed in line with Civil Aviation Authority guidelines to avoid attracting birds. As a result, the assessment identified a negligible effect on Eelmoor Marsh SSSI and a minor adverse effect on the SINC. No other important ecological features will be impacted by air quality changes.





Internationally designated sites within 10km of the site.

TRAFFIC AND TRANSPORT

The traffic and transport assessment considered the likely significant effects of the Proposal on various modes of transport. A Transport Assessment (TA) was produced and provides a more detailed analysis of the Proposal on the transport network. The scope of the TA was agreed with Hampshire County Council (the local highways authority).

The assessment has been based on the Guidelines on the Environmental Assessment of Traffic and Movement. The Guidelines identify that roads with increases in traffic or heavy goods vehicles of more than 30% should be assessed, as well as roads with high sensitivity where traffic flows have increased by 10% or more.

Traffic data was used to model future traffic scenarios with and without development. Based upon the result of the data modelling, it was concluded that the highway links in the vicinity of the Airport were all forecast to observe less than 1% increase in daily traffic flow as a result of the Proposal, significantly less than the 10% threshold which would trigger assessment with respect to highly sensitive links / receptors.

The traffic and transport effects of the Proposal will be negligible.

CUMULATIVE EFFECTS

The assessment considered the likely significant cumulative effects associated with the Proposal.

- 1. Inter-project cumulative effects: the combined effects of the Proposal with other projects affecting the same receptor; and
- 2. Intra-project combined effects: the interaction of different residual effects of the Proposal affecting the same receptor.

Inter-project effects were considered in the technical chapters through the consideration of additional receptors and the cumulation of effects. No likely significant cumulative effects were identified.

Cumulative effects on ecological receptors were inherently considered in the biodiversity chapter. This included combined effects of impacts in relation to noise, air quality and recreational pressures on ecological receptors and did not identify likely significant cumulative effects.

The intra-project assessment only considered residual effects that were reported as substantial, major, moderate or minor in the technical chapters. For this reason, air quality and traffic and transport were not considered any further as all impacts on human health were negligible. The remaining topics – noise, climate change and socio-economics – were assessed for intra-project effects. No likely significant intra-project effects were identified.

CONCLUSION

An EIA has been undertaken has taken account of feedback from stakeholders, including Rushmoor Borough Council, and the local community. The EIA has considered the likely significant effects on a range of receptors across multiple assessment years using a robust framework for the analysis to provide a robust assessment. Mitigation measures have been identified where required.

The only likely significant effects identified were a moderate adverse effect on some dwellings for summer non-weekdays (although noise levels are lower than during the week and noise levels are below where significant adverse effects on health and quality of life occur) and major and moderate beneficial effects on employment and the local economy.

Farnborough Airport Hampshire GU14 6XA

