



The countryside charity
Sussex

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By electronic submission to the
Department of Transport

17 Jan 2025

Dear Sir/Madam,

Application by Gatwick Airport Limited for an Order Granting Development Consent for the Gatwick Airport Northern Runway Project

Interested Party Reference number: 20044812

CPRE Sussex response to the Department of Transport (on behalf of the Secretary of State) Letter of the 3rd Jan 2025 inviting comments on Protected Landscapes duties, climate change and other unresolved matters such as wastewater treatment and issues linked to noise management – submission deadline 17 January 2025

We thank the Secretary of State for the opportunity to formally respond to the points set out in the letter of 3rd January 2025 and to be able to comment on the revised duty that public bodies and other organisations have with respect to furthering the purposes of Protected Landscapes as well as the opportunity to make representations on other matters.

CPRE Sussex is an independent charity with some 2,000 members and supporters in Sussex who are concerned for the landscapes, heritage and environment of Sussex and the benefits these natural assets deliver for the people of Sussex and more widely. We consider Sussex's Protected Landscapes to be of great national and international significance being home to some of the globally rarest terrestrial and aquatic habitats, such as chalk streams, chalk grassland and lowland heath. CPRE Sussex works to help shape the future of Sussex by activities designed to protect, celebrate and regenerate the countryside and green spaces in urban settings. We look to support sustainable development, particularly where this provides a high level of truly affordable homes for local people. We oppose development that we do not feel is sustainable, promoting dialogue, where possible, to improve development proposals once granted. We are currently promoting rooftop solar as a sustainable way in which renewable energy can be provided without the loss of valuable agricultural land and continue with our work to help improve urban areas in Sussex through planting well-established trees in selected locations. We base our work on research and evidence and hope our views are balanced and factual.

With respect to the Gatwick Northern Runway our view remains that the applicant has failed to demonstrate that the Northern Runway proposal is sustainable. The responses of the applicant's and other bodies, such as Thames Water, to the earlier letter from the Department on behalf of the

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Secretary of State on various unresolved matters, and to which all interested parties have now been asked for comment, underline this failure.

In summary, we do not feel that a Development Consent Order should be made because:

- a. Insufficient consideration has been given to the impact of the proposed development on the Protected Landscapes of Sussex and neighbouring counties that may be impacted by atmospheric pollution, visual intrusion, and the impacts of climate change that emissions from the development itself and the aircraft using it will worsen unless these are consistent with the 6th and upcoming 7th carbon budget. It is clear that the duty concerning Protected Landscapes is now to “further” and not just “have regard to” the purposes and thereby the character of these valued places. These landscapes in Sussex contain globally important habitats and impacts on these have not been assessed fully, if at all. Consideration of these landscapes within the DCO process thus far only, at best, takes into account work with respect to “have regard to” but this is self-evidently inadequate in the light of new guidance from Defra (*Guidance for relevant authorities on seeking to further the purposes of Protected Landscapes*).
- b. The proposal is against national airports policy and proposes growth outside the scope of making best use of existing facilities as the proposal would convert Gatwick from a one runway airport to a two-runway airport. The proposal tries to squeeze a quart into a pint pot and is at substantial odds with earlier proposals for expansion at Gatwick that had much greater – and thereby safer – separation between runways.
- c. The provisions on climate change in the draft DCO are too weak and seemingly fail to account for the emissions from aircraft using Gatwick even though these were included within the application by the applicant and much discussed at hearings. This omission seems counter to the UK’s obligations under the Paris Agreement (aviation and shipping both now being part of that process towards net zero that involves phasing out fossil fuels - not granting permission for them to increase) and counter to the advice from the government’s own statutory advisory committee on climate change (the Climate Change Committee) which indicate that no expansion of aviation should occur until the sector demonstrates it can meet its climate change obligations.
- d. CPRE Sussex note also that the proposal seems to face very significant challenges with respect to:
 - i) the availability of data with which to fully assess emissions relevant to climate change - meaning interested parties – and ExA for that matter - have not had all the information they need to assess the proposal;
 - ii) continuing unwillingness on the part of the applicant to compensate residents for noise intrusion;
 - iii) a failure by the applicant to meet the requirements of Thames Water to model wastewater flows hydrologically so that Thames can assess whether or not effluent from the passengers can be handled effectively; and,
 - iv) an expectation that the taxpayer will fund, to an uncoded amount, further upgrades to the rail network to alleviate the significant extra loading an expanded Gatwick will place on the surface transport network as a whole. The costs of this infrastructure work and who will pay for it still seem to be unclear and unplanned for.

All this suggests that, at best, the proposal is incomplete and uncoded in important respects. This could compromise the environmental performance of the project if built. Surely a DCO cannot be issued when there is so much uncertainty about the environmental and financial and economic resilience of a project with such high social costs caused by noise and air pollution, including those from adding to the drivers

for climate change. It would appear such a proposal cannot be regarded as meeting the tests of sustainability.

Supporting detail on points outlined in the summary

1. Furthering the purposes of Protected Landscapes

CPRE Sussex have raised the issue of impacts on a range of protected landscapes at earlier stages of the DCO process and the new guidance from Defra interpretation of the duty with respect to Protected Landscapes highlights the issues concerned. CPRE Sussex do not believe the new duty to further the purposes of Protected Landscapes has been discharged. There may have been actions and activities that considered the older version of the duty (to “have regard to” the purposes) but none that could be considered to further the purposes as per the new guidance. Sussex’s Protected Landscapes are considered important in terms of their public health functions as oases of tranquillity, and both the High Weald and South Downs National Park provide striking semi-natural landscapes with views valuable for people’s wellbeing and many opportunities for walking and interacting with nature. The pollution, noise, overflying aircraft and contrails from an expanded Gatwick Airport would all negatively affect these valuable aspects of the Protected Landscapes and harm rather than further the relevant purposes.

Furthering the purposes might involve ensuring harmful or damaging emissions, noise and visual intrusions were reduced. Harmful or damaging emissions most relevant to the High Weald and the South Downs National Park include nitrogen deposition and the impacts of climate change. Nitrogen deposition can arise from aircraft movements on the ground and in the air with recent estimates suggesting that over 30% of the total emissions occur near airports. Depending on its form nitrogen can fertilise and acidify terrestrial and aquatic habitats and both the Ashdown Forest area of the High Weald and the chalk streams and grasslands in and around the National Park are sensitive to such inputs. Under the new duty it is unlikely to be sufficient to demonstrate that there are limited impacts. It is likely to be necessary to show there will be lower impacts and the Northern Runway proposal would seem to increase the risk of these, against the new guidance. This would be especially as no mitigating actions or steps to improve the status of sensitive habitats have been proposed. Nitrogen deposition may be important both now and in future because emissions of nitrogen gases may increase in future depending on the nature of the fuel mix – some sources of so-called sustainable aviation fuels are likely nitrogen rich.

Climate change impacts on natural landscapes will result from increased temperatures – leading to disrupted seasonality – and a heavily modified hydrological cycle which will increase extreme events increasing risks of drought, flooding and wildfires. These changes will be profound for Protected Landscapes and the increased emissions from aircraft that the applicant included in their submissions as material to the decision-making process will contribute to the harm and damage the habitats in the Protected Landscapes suffer from climate change unless mitigated in some form. No work to assess these impacts or mitigate them appears to have been done in a manner that can be said to further the purposes of the Protected Landscapes.

2. The Northern Runway proposal is against policy

CPRE Sussex remain of the view that the Northern Runway project would result in the expansion of Gatwick Airport in a manner inconsistent with national airports and aviation policy. Extant policy places a third runway in the south-east at Heathrow and not Gatwick (indeed it specifically excludes Gatwick) and what is proposed in the Northern Runway project increases capacity far above what can reasonably

said to be “making best use” of existing facilities. We also feel that the failure to account for wastewater matters and the objections to the draft DCO Gatwick have made on noise matters suggest they have no wish to comply with other policy position either. CPRE Sussex cannot see how the SoS can grant permission to develop in such circumstances.

3. Climate Change

We make these remarks in the light of the most recent information on rising global temperatures and the continuing rise in atmospheric carbon dioxide concentrations that have been recently announced by authoritative bodies such as the UK Met Office and their international partners. 2024 was a year characterised by extreme weather events worldwide, record carbon dioxide levels and ocean temperatures, and a global average temperature that was 1.6 degrees centigrade above pre-industrial values. Impacts in the UK made more likely by climate change included severe storms, poor farming and harvesting conditions and flooding. On Sussex’s coasts erosion problems mount, with sea-levels now rising faster than expected. The amenities of millions of visitors to Cuckmere Haven and properties and farmland between Littlehampton and Climping Foreshore (where Rampion 2 infrastructure may come ashore) are all at risk of being lost. As yet, formal references covering these very recent findings announced in the last week and given wide publicity by the BBC and others, are not yet available in referenceable forms. They could be supplied, if necessary, shortly.

Limiting greenhouse gas emissions should be a top priority of any government that needs to meet its international obligations to meet the terms of the Paris Agreement on climate change which now include, through the work of the Conferences to the Parties, the need to phase out fossil fuels. Giving permission for a development that will increase emissions runs counter to that international obligation and risks incurring economic damage from climate impacts that could outweigh any gain to the economy of expansion.

CPRE Sussex is deeply concerned that the draft DCO is so very weak on Climate Change because it does not appear to cover aircraft emissions. As such this makes the draft DCO highly inconsistent as it covers noise and air pollution from aircraft but not greenhouse gas emissions. The DCO needs to be strengthened in this respect and CPRE Sussex proposes how this might be done (see below).

Climate Change poses increasing risks to all the environments and people of Sussex and CPRE Sussex does not understand why, when Government policy and supporting documents (such as Making Best Use of, Flightpath to the Future Jet Zero – One Year On) and the Government’s own statutory independent advisors on Climate (the Climate Change Committee) all seem predicated on the view that emissions from aviation are as integral a part of airport and aviation policy and operations as the runways themselves. None of these documents separate airport expansion and emissions from the aircraft as the draft DCO seems to do. The airport would be a stranded asset without the aircraft flights that are integral to its operation and presumably this is one reason the applicant included aircraft emissions in its case for development. If the Applicant has brought the emissions forward surely the DCO should reference them and propose mitigations that could be applied during the lifetime of any development. We propose in principle mitigations that could be included in the DCO but first must deal with the practicalities and lack of market confidence in SAFs.

3.1 Sustainable Aviation Fuels (SAFs)

CPRE Sussex recognise that many in the aviation industry – including those in policy groupings that sponsored and support CORSIA – believe that extensive use of SAFs is the only way in which aviation will

be able to even approach a significant contribution to net zero in the next two or three decades (we would then be at 2050 when net zero must be achieved). However, the economic cost and supply chain challenges are very great and the nature of the life-cycle analysis by which greenhouse gas emission savings are achieved are still the subject of considerable uncertainty and research (as pointed out and called for by the Royal Society). A summary of research in hand suggests there is still a great deal to do to supply SAF at a scale and a quality that will not raise a number of other issues linked to land-use (competition with food-production or biodiversity or forests) and to complex market factors such as competition between road and air transport for “sustainable” fuel sources. Efforts to supply even the relatively small quantities of SAFs required in existing mandates seem to founder quite often and UK efforts seem insufficient as airlines operating out of UK and Irish airports (such as Ryanair) seem to look to European sources for SAF supplies. This must mean there is great uncertainty about the aviation sector’s ability to meet its own roadmap towards net-zero and for UK airports to play their part in ensuring sufficient supplies - let alone exceed this to align with the Climate Change Committee’s view on airport expansion.

In addition, there is a major issue with SAFs from biological sources, such as waste oils and waste timber etc. that does not yet seem to form part of relevant life cycle analyses. This is that, at a time when the cycling of carbon dioxide in planetary processes needs to such that temperatures meet the ambitions of the Paris Agreement, SAFs, and allied products for road transport, have the effect of transferring carbon from the terrestrial environment to the atmosphere. This is exactly the opposite of what is required. In this sense, SAFs are no better than fossil fuels as the aircraft tail pipe emissions are no different and in some respects could be worse, say in terms of air quality or non-carbon climate change impacts, if the aromatic or nitrogen content of the SAFs were too high or combustion led to more particulates materials rather than less.

Further, the entirely synthetic SAFs have their own issues – like the very large amounts of electricity required in their manufacture that makes them impractical and expensive.

Worse than these issues however in terms of their effectiveness in meeting the UK’s net zero ambitions may be that, according to recent European aviation sector estimates SAFs - even if the Life-Cycle Analyses on savings are accepted - will be able to reduce emission by about half by 2050. If the sector grows as it wants that is likely to leave aviation emissions about where they were in the late 2010s, i.e. far from the net-zero required by then to avoid serious climate harms. In that case, SAFs are not the solution they are currently thought to be.

Given all the above, CPRE Sussex’s view is that the Applicant and the Draft DCO (even as amended) do not address the need identified in Flightpath to the Future (p8) for each airport that seeks to expand to address its climate change obligations. Various aspects of this were set out by CPRE Sussex sets out in its Deadline 4 submission.

3.3. Other points relevant to greenhouse gas emissions

Other points then arise from how the Applicant has previously responded to the ExA (e.g. Response to the Examining Authority’s Written Questions – Climate Change and Greenhouse Gases, p3) and the absence of emission cap measures in the draft DCO.

To meet climate change obligations the Applicant appears to rely on the High Ambition scenario in the Jet Zero Strategy documents which are heavily dependent on the introduction of technologies (such as

Sustainable Aviation Fuels) that do not yet exist at the necessary scales and whose emission savings have been called into some question by the Royal Society through its call for more research (CPRE Sussex Deadline 4 submission). These technologies include free air capture of carbon dioxide – again a nascent technology in terms of deployment at scale. CPRE feel the applicant has not addressed these issues in ways that ensure emissions will decline to net zero by 2050. The roadmap also factors in a decline in passenger numbers and yet the proposal for a second runways at Gatwick does not appear to have factored this in, instead it proposes increased numbers.

We note also that the Applicant has not fully answered the point made by the New Economic Foundation that the climate change impacts of non-carbon dioxide emissions need to be accounted for by use of the accepted established DESNZ multiplier (The Applicant's Response to Written Representations: Appendix D – Response to New Economics Foundation pp 2 and 3). The Applicant argues that Dft guidance allows the Applicant to make no use of the multiplier even to perform some sensitivity analyses. This does more than run against the spirit of this guidance. Since application of the multiplier to the proposal's emissions could push increased emissions into the range where they must be taken into account in decisions. Absence of any use of the multiplier seems to be a serious weakness in the Applicant's case and makes it harder for the decision-makers and interested parties to assess the proposal. Surely decision-makers need to know whether the projects greenhouse gas emissions have to be taken into account or not in terms of their national significance with respect to the Sixth (and Seventh) Carbon Budget?

So, CPRE Sussex remains opposed to the Northern Runway proposal but, if the Secretary of State were minded to grant permission for development, CPRE Sussex believe that the aircraft emissions must be capped or recovered from the atmosphere so that emissions reductions align – at the very least - with the industry's own RoadMap set out in documents previously referred to. We would also draw attention to the possibility that the forthcoming 7th Carbon Budget that may further constrain carbon intensive sectors such as aviation. We believe that the approach outlined below would be help improve sustainability of any development if permission were to be granted.

3.2 Mitigating greenhouse gas emissions: A decreasing carbon emissions cap aligned with the aviation sector's own roadmap to Net Zero and the 6th (and 7th) Carbon Budgets.

The "carbon plan" in the draft DCO and other responses of the Applicant (say to the New Economics Foundation and others) reinforces the view that the Applicant is over-reliant on the speculative roadmap and high ambition scenarios contained in documents such as the Jet Zero Strategy, Jet Zero Strategy One Year On, and Flightpath to the Future (see the CPRE Sussex deadline 4 submission).

CPRE Sussex notes that the draft DCO as earlier amended by the ExA already places restrictions on operations in relation to noise and public transport and now makes further provisions in these areas. We fully support these amendments to the original draft DCO. It seems only consistent for provisions to be made with respect to greenhouse gas emissions.

CPRE Sussex ask that the draft DCO be amended to restrict greenhouse gas emissions, if the scenarios for emission reductions are not being achieved. The desired rate of reductions in emissions to reach net zero could be deduced from the roadmap and/or the UK Carbon Budgets. If the Applicant wishes to depend on the high ambitions inherent in the aviation net zero roadmap to meet its climate change obligations, then they should be willing to accept the need to operate within the emission reduction

pathway indicated by the roadmap. The Applicant has several ways in which it could implement a declining cap on emissions by, say, reducing use of aircraft stands or that of the proposed second runway if the sector as a whole were not delivering on the technology to mean Gatwick emissions would be on track to reach net zero by the due date. The choice of method would be up to the Applicant. The government would not be restricting flights per se if the DCO had a declining greenhouse gas emissions cap. Other international airports and governments are taking or exploring not dissimilar approaches (e.g. Schipol). CPRE Sussex has already suggested that technology could be installed to achieve free air capture of carbon dioxide – again this is part of the roadmap to net zero. This could be a necessary condition of the operation of two runways, say, after 2035 (we do not propose an earlier date because we accept this technology is not yet available at sufficient scale). Annual reporting on emissions should also be explicitly required so that progress can be transparent to all users of the airport and local residents and so the SoS can base any decision to restrict future operations that were exceeding national emission budgets on transparent and robust evidence. Non-carbon dioxide emissions would need to be accounted for as well as carbon-dioxide ones.

We regret we are unable to propose draft wording for the DCO on this matter. This is because the applicant's approach obscures the magnitude of emissions by not including an appropriate multiplier for non-carbon dioxide emissions.

3.4. Monitoring matters relevant to climate change

We do not believe that Crawley Borough Council (or any local successor body) have the resources to properly monitor the climate change issues linked to airport expansion. If permission were to be granted progress towards net-zero needs to be assessed by an independent monitoring organisation or by methods the aviation sector, and the applicant in particular, should be encouraged to bring forward as a matter of urgency.

4. Wastewater Treatment

Thames Water have asked Gatwick to complete a number of studies on the hydrology of the wastewater treatment options based on passenger numbers. Thames will need to know peak and minimum flows before they could possibly design an appropriate upgrade. Surely, it is impossible to grant permission for development if the waste cannot be treated as this will lead to the contamination of water courses through negligent inaction? Such upgrades data and modelling should have been part of the DCO hearings as they are a matter of great public concern given the poor performance of the water sector in recent years. Waste cannot be dealt with as an afterthought.

It seems the data and modelling requested have still not been forthcoming meaning that, should permission to develop be given, Sussex residents living near the airport and the Sussex environment would be subject to overflows of wastewater from Gatwick Airport until such time as these studies are completed and any upgrade to the sewage treatment works is undertaken and becomes operational. Such upgrading to operational status must be years away and this is an example of how inappropriate it would be to grant permission as the Northern Runway project has been conceived without proper consideration of all aspects of its construction. It might cost Gatwick £40M to install an onsite treatment works and, for CPRE Sussex, this would be the best option; but, even for this they would need to conduct hydrological modelling based on a projection of passenger numbers to ensure no waterways were contaminated or residents subject to foul flooding. Surely, Gatwick could do this at the least in the

was that Thames Water ask? If not, then their case for the Northern Runway must be flawed in some way.

5. Noise measures

On issues of noise, air pollution (other than greenhouse gases) and night flying CPRE Sussex is fully supportive of the views of CAGNE. We also note that responses from other bodies would support CAGNE positions.

CPRE Sussex are fully supportive of any measures to keep the intrusive and harmful effects of noise from Gatwick to a minimum. This will benefit the environment and residents of Sussex for the most part although the impact on any local residents forced to move is very regrettable and the full costs to such people might not have been allowed for in all the estimates of economic benefit.

We were surprised by the Gatwick response to the proposals in the draft DCO with respect to measures to compensate residents whose interests, health and well-being might be damaged by the airport's operations. As a polluter aiming to profit from that pollution, they must pay to mitigate the impact of their operations (and this includes that from the aircraft using their runways) if they cannot use technological or operational means to reduce the pollution. If they are not willing to accept the Polluter Pays Principle they should not be granted permission to develop.

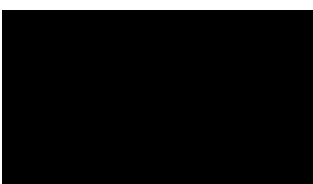
6. Night flights


Gatwick operations are already intrusive at night times. Any increase in night flying will cause health and well-being problems for the people and wildlife of Sussex. CPRE Sussex do not think that the economic costs of such disturbance of people's sleep and rest has been accounted for in the economic analysis. 10,000s of people would be affected by any changes to night flying as aircraft already pass over densely populated areas at night. CPRE Sussex are opposed to any expansion of night flying.

7. Surface transport to access an expanded airport

It seems to be late in the day that Gatwick have begun to recognise the problems that expanded passenger numbers will have for access by surface transport, in particular for the numbers that might be expected to arrive by rail. Platforms at Gatwick are often overcrowded already and appear to cause station staff considerable anxiety and concern for passenger safety. Improvements to the concourse have helped but these are likely to be overwhelmed by the projected numbers. It is clear this is another example of Gatwick's unwillingness to pay the costs linked to their plans as they state they expect the Government to continue to upgrade the rail system. This means the taxpayer will pay for improvements needed to realise the profits from expansion. This seems to be unfair on the taxpayer who has already only very recently paid almost the whole cost of the railway station upgrades which would soon be outdated if permission to develop is granted.

Yours faithfully,



, Chair, CPRE Sussex.

Sample Supporting References

On SAFs:

Rosales Calderon, Oscar, Ling Tao, Zia Abdullah, Kirsti Moriarty, Sharon Smolinski, Anelia Milbrandt, Michael Talmadge, et al. 2024. Sustainable Aviation Fuel (SAF) State-of-Industry Report: State of SAF Production Process. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5100-87802. <https://www.nrel.gov/docs/fy24osti/87802.pdf>.

EASA (2025) European Aviation Environmental Report 2025. ISBN: 978-92-9210-286-9 (PDF). Doi: 10.2822/1537033 (PDF). Catalogue Number: TO-01-24-000-EN-N (PDF)

Nitrogen:

Quadros FDA, van Loo M, Snellen M, Dedoussi IC. Nitrogen deposition from aviation emissions. Sci Total Environ. 2023 Feb 1;858(Pt 3):159855. doi: 10.1016/j.scitotenv.2022.159855. Epub 2022 Nov 3. PMID: 36336055.