















## GATWICK AIRPORT NORTHERN RUNWAY PROJECT

Planning Inspectorate's Reference: TR020005

### **Legal Partnership Authorities**

# Comments on The Applicant's Response To The ExA's Written Questions (ExQ1)

Response to [REP3-105] | Water Environment

**DEADLINE 4: 15 May 2024** 

Crawley Borough Council (GATW-AFP107)

Horsham District Council (20044739)

Mid Sussex District Council (20044737)

West Sussex County Council (20044715)

Reigate and Banstead Borough Council (20044474)

Surrey County Council (20044665)

East Sussex County Council (20044514)

Tandridge District Council (GATW-S57419)

#### Legal Partnership Authorities' Comments on the Applicant's Responses To The ExA's Written Questions (ExQ1)

#### Response to [REP3-105] | Water Environment

The Legal Partnership Authorities are comprised of the following host and neighbouring Authorities who are jointly represented by Michael Bedford KC and Sharpe Pritchard LLP for the purposes of the Examination:

- Crawley Borough Council
- Horsham District Council
- Mid Sussex District Council
- West Sussex County Council
- Reigate and Banstead Borough Council
- Surrey County Council
- · East Sussex County Council; and
- Tandridge District Council.

In these submissions, the Legal Partnership Authorities may be referred to as the "Legal Partnership Authorities", the "Authorities", the "Joint Local Authorities" ("JLAs")" or the "Councils". Please note that Mole Valley District Council are also part of the Legal Partnership Authorities for some parts of the Examination (namely, those aspects relating to legal agreements entered into between the Applicant and any of the Legal Partnership Authorities).

#### Introduction

- 1. The Legal Partnership Authorities have now had the opportunity to review the Applicant's responses to ExQ1 in conjunction with their specialist consultants and legal advisors.
- 2. The Applicant provided their response to ExQ1 in the form of 19 separate written submissions to the examination together with annexes. For the ExA's ease of review, the Legal Partnership Authorities set out their comments on the Applicants responses in the final column of the table below.
- 3. Where the Legal Partnership Authorities have decided not to comment on one of the Applicant's responses, this question has been deleted from the table below.
- 4. For the avoidance of doubt, where the Legal Partnership Authorities have decided not to comment on one of the Applicant's responses this should not be taken to indicate that the Legal Partnership Authorities agree with the response.

ExQ1	Question to:	Question and Applicant's answer	Legal Partnership Authority Response
WE.1.6	The Applicant EA	<ul> <li>Flood Risk Assessment</li> <li>Paragraph 5.10.13 of the FRA [AS-078] states that the Proposed Development "would not increase flood risk elsewhere and that it would be safe for users for its lifetime mean that the requirements of the Exception Test have been met". Some elements of the Proposed Development (Table 3.3.10) are stated to have differential lifetimes. Explain: <ul> <li>How long is the "lifetime" of all elements of the Proposed Development?</li> </ul> </li> <li>Has the EA accepted this duration for all elements? and</li> <li>Does the mitigation secured within the dDCO cover this whole period?</li> </ul>	This is acceptable for the assessment of fluvial flood risk, as the correct climate change allowances have been used and the mitigation strategy provided assumes the equivalent of a 100-year design life for all elements (surface access works and airfield works). However, WSCC as Lead Local Flood Authority, would like to see a similar approach taken for surface water.  The climate change allowances used for the surface water hydraulic model reflect the design life proposed by the Applicant for specific Project elements (surface access works 100 years and airfield works 40 years). However, an adopted design life of at least 75 years should be used for the airfield works, and as such the climate change allowance for the airfield works should be increased from 25% to 40%. This is detailed in the West Sussex LIR, Chapter 10, Paragraph 10.38 [REP1-068], the West Sussex Statement of Common Ground, Table 2.21, Ref 2.22.4.4
		The design life adopted for the Project varies as stated in Section 6 of the <b>ES Appendix 11.9.6 Flood Risk Assessment</b> [AS-078]. The adopted lifetime for the surface access works is 100 years (up to 2132) and 40 years (up to 2069) for the airfield and associated works.	[REP1-032] and the West Sussex Relevant Representation, Paragraph 3.15, vi [RR-4773].  The Applicant has defined the design life of the airfield works as 40 years (up to 2069) in the Flood Risk Assessment, Paragraph 3.76 [APP-147]. This includes extensions to the existing airport terminals, provision of additional hotel and office space and other

The incorporation of the predicted impacts of climate change on flood risk has been discussed and agreed by the Environment Agency and the Applicant through the SoCG process (see item 2.22.2.2 of the **Statement of Common Ground between Gatwick Airport Limited and the Environment Agency** that was submitted at Deadline 1 [REP1-034]).

Through SoCG discussions the Environment Agency has requested sensitivity testing of a longer assumed design-life for the airfield works. However, it should be noted that as the Project has developed a combined fluvial flood mitigation strategy for both airfield and surface access elements, mitigation is provided to ensure no increase to other parties up to the 1 per cent (1 in 100) AEP event, plus the Central allowance of +20 for climate change event. This is equivalent to assuming a 100-year design life for the airfield elements. This approach has been agreed with the Environment Agency, see item 2.22.2.2 of the Statement of Common Ground between both parties that was submitted at Deadline 1 [REP1-034].

The modelling reported in the **FRA** [APP-147] demonstrates that through provision of the mitigation measures listed in Table 11.8.1 of **ES Chapter 11: Water Environment** [APP-036] the Project will not increase existing levels of fluvial (river) or surface water drainage flood risk for these lifetimes including the predicted impact of climate change.

works, as detailed in the Flood Risk Assessment, Paragraph 2.2.2 [APP-147]. The Flood Risk and Coastal Change Planning Practice Guidance (PPG) states that a lifetime of at least 75 years is likely for non-residential development in Paragraph 006, Reference ID: 7-006-20220825.

The Applicant has adopted the Central allowance of 25% for climate change for the airfield works in the Flood Risk Assessment, Paragraph 3.7.15 [APP-147]. This is correct for development with a design life between 2061 and 2100. However, a development with a lifetime beyond 2100 should use the Upper end allowance of 40% climate change in accordance with Flood Risk Assessments: Climate Change Allowance Guidance, Environment Agency, for the Mole Management Catchment. The airfield works should have a design life of at least 75 years (up to 2104), therefore a climate change allowance of 40% should be used. This has resulted in an underestimate of the impact of the design on surface water flooding and the storage requirements for surface water drainage. This could result in increased flooding elsewhere.

Figure 7.3.1 and Figure 7.3.2 of the Flood Risk Assessment [APP-147] provide a sensitivity test, comparing the surface water flood extents for the 1 in 100 year event with a 25% and a 40% climate change allowance for the two critical duration events. The critical duration events are the durations of the rainfall event likely

It should be noted that the fluvial flood risk mitigation strategy does not in effect differentiate between the two design lives. The mitigation strategy as reported in the **FRA** [APP-147] has been developed holistically and mitigates fluvial impacts for all Project elements up to the Central allowance of 1% (1 in 100) + 20% climate change event (the 2080s epoch). In effect therefore the Project provides additional mitigation beyond that required for the airfield and associated elements given their shorter assumed design life of 40 years.

to cause the highest peak flows or levels for this return period so, in effect, the critical event to design the surface water model to ensure that flood risk is not increased. Both figures show a larger extent of flooding with a 40% climate change allowance, compared to the 25% climate change allowance, with water above the surface. As this water is above the surface, it demonstrates that the drainage system does not have capacity for that volume of water. Although the flood extent is still within the DCO Order Limits, the exact locations of flooding cannot be verified as the finished ground levels are due to be resolved at detailed design – as detailed in the Flood Risk Assessment, paragraph 7.3.14 [APP-147]. Until we have the levels, we cannot be satisfied that flood risk will not increase elsewhere.

Additionally, much of the existing airfield infrastructure is older than 40 years:

- The planning applications for the development of Gatwick North Terminal were submitted in 1979 and CBC aerial photos (dated 1981) show that a substantial expansion of the airport including the remodelling of airfield infrastructure took place around this period implementing these various permissions. In design terms much of this infrastructure related to the North Terminal is therefore circa 40 years old. The airport east of the railway also was constructed around this period.
- The South Terminal existed prior to 1979 and again it is

evident from the aerial photography that the original terminal and station infrastructure has been extended and remodelled since this time. It would therefore be reasonable to assume that the flood risk modelling was recalculated by the airport operator as the footprint of the buildings were extended.
Some of the airport buildings and elements which have clearly been in situ in their current form for around 40 years include:
Pier 3 – which is circa 40 years old
<ul> <li>Pier 2 – which appears to have been extended westwards between 1981 and 1991, but the substantial element of this is over 40 years old</li> </ul>
<ul> <li>Multi Storey Car Parks 1, 2 and 3 at South Terminal east of railway (see Figure 4.2.1b [REP1-019])— all under construction in 1981 – footprints unchanged and not proposed to be altered as part of DCO</li> </ul>
Offices known as Ashdown and Atlantic House (just north of main South Terminal Building) – footprints unchanged and not proposed to be altered as part of DCO
BA Hangar (located on the southern boundary of the airfield – see Figure 4.2.1a) – constructed between 1971 and 1981 – not proposed to be changed as part of DCO.

Given the duration of the proposed DCO project, which covers a period of expansion to 2047 (a period in excess of 20 years), a large amount of the existing infrastructure is also proposed to be unchanged and would therefore be in situ in excess of 40 years by the end of this implementation period. Two such examples are the environmental bunds (see Figure 4.2.1a) which were clearly constructed by 1991 (the date of the next aerial photography) and the Cargo sheds – in situ by 1991.

As the above examples demonstrate, the design life of the airfield works is likely to be greater than 40 years. Even though some of the elements may be changed or replaced after 40 years, the structures will not be demolished and the land will not be returned back to its natural state and will therefore continue to impact flood risk and drainage beyond 40 years. Changes to the airfield works after 40 years may not need new planning permissions and may not result in an updated drainage strategy which accounts for the changes beyond 40 years. Therefore, the Applicant should consider a longer design life for the airfield works at this stage of the design.

### WE.1.8 The Applicant Thames Water

#### **ES Chapter 11 – Water Environment**

Table 11.3.4 of **ES Chapter 11** [APP-036] states that Thames Water will be undertaking its own assessment of the impact on its network. It is assumed that this will include the capacity of nearby Wastewater Treatment Works to accommodate any increase in wastewater arising from the Proposed Development.

Has this been completed? Will the findings be submitted into the Examination and if so, when? Also explain how any necessary infrastructure improvements would be secured.

The Applicant and Thames Water (TW) have been in discussion about the Project since 2019. Initial survey work on the Gatwick estate was carried out by TW in early 2021. TW and the Applicant have agreed the scope of two studies to understand any project implications for both the network (pipes) and processing facilities (the treatment plants at both Horley and Crawley). These studies will be conducted by TW in two stages – the first stage using existing survey data (from both TW and the Applicant (supplied in 2021)) and the Applicant's water model outputs (supplied in 2021), the second stage being a verification exercise after a further round of surveys are undertaken during the first half of 2024.

The JLAs support the need for ongoing liaison between the Applicant and Thames Water, and the need for confirmation prior to a decision being made that sufficient wastewater treatment capacity is available for the Project and for planned growth in the area.

The JLAs note the recent notification from the Applicant proposing a Change to the DCO to accommodate an additional wastewater treatment works on the airport. The JLAs will review the relevant information in due course.

The Applicant's foul water strategy has been designed to minimise any impact on TW assets by:

- Diverting a part of the airport catchment which currently drains to the Horley works to now drain to the Crawley works (on the understanding that there is greater capacity available at the Crawley works); and
- Designing on-airport surface water treatment facilities which remove the need for the large trade effluent flows currently being sent from the airports drainage lagoons to the Crawley works thus reducing the load on this facility.

It is hoped that the first phase of the studies will be complete by the end of May 2024 and will enable both parties to understand whether any upgrades are likely to be necessary to the TW network or processing facilities to accommodate future forecasted flows from the airport as a result of the Project. It is unlikely that the second phase of verification using further surveys will be complete before the end of the examination period.

Whilst TW acknowledge that they have a duty to deal with the 'domestic' foul water flows (i.e. those coming from the terminals etc. which are not subject to trade effluent agreements) from the airport, pending the outcome of their additional modelling/assessment work they are requesting a requirement to be included in the draft DCO to prevent airport growth arising

from the Project being implemented until any necessary upgrade works to TW infrastructure have been carried out. Whilst the Applicant does not consider the imposition of such a requirement to be necessary or appropriate in view of the Project's proposals and TW's underlying statutory responsibility/duty to accommodate the additional flows, the Applicant is mindful that TW's additional modelling verification is unlikely to conclude prior to the close of the examination and the challenges this poses to the ExA's consideration of the Project and its impacts/mitigation.

The Applicant could not accept the potential delivery risk that would be created were the ExA minded to recommend TW's suggested requirement be imposed in the draft DCO (particularly noting recent news regarding the financial conditions within which TW is currently operating, and the uncertainty this may create on their development plans).

Accordingly, the Applicant is considering alternative approaches, which may include the submission of a change to the Application to include an on-airport foul water treatment works which would deal on-site with all foul flows arising from the whole airport following the implementation of the Project. Were this change to be proposed, the Applicant will notify the ExA at the earliest opportunity following the next round of hearings. The Applicant remains hopeful that the need for such a bespoke facility will not be necessary and that TW's additional modelling will verify that

		sufficient capacity is available, or that an alternative agreement can be reached (e.g. to contribute proportionate funding to an expansion to the existing facilities, recognising the wider background growth that will also contribute to any capacity challenges, independent of the Project (or the Airport)). However, the Applicant considers it may be necessary to consider an alternative approach to safeguard the consent and timely delivery of the Project in the counter-factual circumstances where agreement is not reached and constraints on the Project's delivery are otherwise proposed.	
WE.1.9	The Applicant  Sutton and East Surrey Water	ES Chapter 11 – Water Environment  Table 11.3.4 of ES Chapter 11 [APP-036] states that Sutton and East Surrey Water will be undertaking its own assessment of the impact on water supply.  Has this been completed? Will the findings be submitted into the Examination and if so, when?	The Authorities welcome SESW's confirmation that it has accounted for the demand Gatwick anticipates and hope this is entered into the Examination as evidence. Given the Airport is located within an area of serious water stress, (Joint West Sussex LIR [REP1-068] para 24.83) designated by the Environment Agency, the Authorities consider the commitment made by the Applicant to water efficiency in its Decade of Change, and its reference to "considering" water efficiency in its Design Principle BF2 Design and Access Statement [APP-257] should instead be enforceable commitments with the DCO, in line with BREEAM excellent within the Water category as required by Local Plan Policy ENV9 of the adopted Crawley Local Plan and Policy SDC3 of the emerging Crawley Local Plan.
		The ExA will note in the subsequent entry to Table 11.3.4 that SESW confirmed in January 2020 that their network and sources would be able to meet the increase in demand as a result of the Project.	
		This general position notwithstanding, the Applicant confirms it	

has continued to engage with SESW in the interim and most recently SESW wrote to GAL to confirm on 9 February 2024 that:

"When preparing our [SESW] water resources management plan, we received details from Gatwick concerning the future demand the airport anticipates so we can ensure we maintain a balance of supply and demand to meet the needs of water users in our area. Our current plan, and proposed revision (due to be published in 2024), accounts for the demand Gatwick anticipates. We therefore do not consider we need to make a representation to the Planning Inspectorate relating to the proposed development as a consequence of ensuring our operation as a water undertaker.

Separate to the requirement to maintain a water resources management plan, the Environmental Improvement Plan has placed stretching targets on each water company in England and Wales to reduce our customers' and end users' water consumption over the next 25 years. We would therefore separately encourage the ongoing discussions between our organisations supporting Gatwick's decade of change, which we appreciate is a wholly separate project to the Northern Runway development but will ultimately enable our two organisations to demonstrate excellent water efficiency and the upstream/downstream benefits to the water system and

	environment arising from this."	
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