ACOG is required to submit the information and advice below (working with the relevant ACP sponsor – in this case Manston Airport).

ACP Reference: ACP-2018-75	**Date:** 26 Feb 2021
Sponsor: RiverOak Strategic Partners Ltd	**Stage 2 Gateway Date:** 26 Mar 2021

1. ACP Interactions

In terms of the potential options contained within this ACP's are they:

a) Fully isolated from other sponsors (including airports/NERL) existing operations/procedures or planned airspace change?
b) Likely to conflict with another sponsors existing operations/procedures?
c) Likely to conflict with another sponsors planned airspace design options, but mitigations/agreements are possible?
d) Likely to conflict with another sponsors planned airspace design options, but mitigations/agreements are not possible?

Form-2 suggests that ACOG use design envelopes to illustrate the locations where interactions between dependent ACPs might arise. The FASI South participants potentially affected by the progress of ACP-2018-75 have yet to develop airspace options as part of their proposals that can be used to determine the dimensions of the design envelopes. As a result, the nature of the potential interactions created by ACP-2018-75 are summarised in a narrative format below. This narrative should be read in conjunction with the charts provided by the ACP Sponsor, which depict the shortlisted design options, in the Stage 2B Initial Options Appraisal.

ACP Interactions

The shortlist of potential options set out in the Stage 2 submission for ACP-2018-75 (Manston) are best described as:

c) Likely to conflict with another sponsors planned airspace design options, but mitigations/agreements are possible.

This section summarises ACOG's evaluation of the potential interactions between the Manston shortlisted options and the existing airspace/future designs of other FASI South participants.

Potential interactions with Manston departure options

1. All shortlisted departure options in the Manston Stage 2 submission (from both runway ends – RWY10 and RWY28) route to the East or South East before heading North or West. This appears to be a practical solution to ensure that the departure options do not interact with the main outbound traffic flows from the London TMA that route towards Dover, until Manston traffic is above 7000ft.

2. Based on the information provided in the Stage 2 submission, four FASI South participants may share potential ACP dependencies with the Manston shortlisted options: London Biggin Hill Airport, London City Airport, London Southend Airport and NATS Enroute Limited (NERL) London Terminal Control.

3. Following a review of the Initial Options Appraisal for the Manston shortlisted options, ACOG is confident that traffic outbound from Biggin Hill and London City airports should not interact with any of the proposed departure routes below 7000ft (in the existing airspace or as part of a future ACP design).

4. Outbound traffic from Southend airport routing South towards Dover may interact with the Manston departure options below 7000ft in the existing airspace and as part of a future Southend ACP design. ACOG are confident that there is a range of potential solutions available to resolve the interactions should they arise. It is envisaged that the potential solutions will be further defined and evaluated, in collaboration with Southend airport, during the Full Options Appraisal in Stage 3 of the Manston ACP.

5. All potential interactions between the Manston departure options and NERL's current London Terminal Control operations arise above 7000ft. For example, one key interaction considered at this stage concerns the shortlisted options for traffic routeing north from Manston. The proposed departure procedures appear to route traffic to the East of the Approach Transitions for traffic inbound to London City at Flight Level 80 and above. If Manston traffic using the proposed departure procedures achieve a continuous climb to 7000ft. as suggested in the Initial Options Appraisal, they will climb into the existing Controlled Airspace managed by NERL. This would mean that Manston ATC will require clearance from NERL before any departure into Controlled Airspace is released. Manston's engagement with NERL during Stage 2, and in due course during Stages 3 and 4, will determine how these network interactions are to be managed effectively.

Potential interactions with Manston <u>arrival</u> options

6. The Manston shortlisted arrival options that propose new Instrument Approach Procedures (IAPs) to RWY28, together with the associated airborne holds and the Initial Approach Fixes (IAFs), are all contained beneath the existing Controlled Airspace and well clear of other potential interactions below 7000ft. The arrival options that would serve traffic inbound to Manston from the North do create potential network interactions with London City arrivals at Flight Level 80. However, it is expected that NERL will resolve these interactions before the flights descend below 7000ft.

7. The Manston shortlisted arrival options that propose new Instrument Approach Procedures (IAPs) to RWY10 create several potential interactions below 7000ft. The arrival options that would serve traffic inbound to Manston from the South West indicate that aircraft would be at a height of c.7000ft around the Detling VOR-DME. This will generate a network interaction for NERL to resolve above 7000ft. Assuming this is achievable, the subsequent descent path for Manston arrivals below 7000ft may interact with departures from Southend routing towards Dover.

8. Arrival options for Manston traffic inbound from the North and North East appear to route in the same lateral vicinity as the existing London City Approach transitions. If the Manston arrivals are beneath the existing Controlled Airspace along all of these transitions then there is no conflict below 7000ft. with London City or Biggin Hill arrivals. However, there may again be interactions below 7000ft. with departures from Southend routing towards Dover.

9. Finally, potential interactions may also arise from the proposed location of the Northerly IAF hold in the Manston shortlisted options, which appears to be in close proximity to the existing Shoeburyness Danger Area complex and the Southend CTA/CTR, especially when incorporating the hold protection area.

Engagement

For each design envelope please provide details of engagement with relevant ACP sponsors (including airports/NERL) or those responsible for existing operations/procedures to support your response to Q1.

Engagement with relevant ACP sponsors

10. RiverOak Strategic Partners Ltd and their appointed technical consultants Osprey Consulting Services Ltd. have engaged directly with the FASI South participants that may share ACP dependencies with the Manston shortlisted options. All participants have confirmed in short written statements that they have no objections to ACP-2018-75 proceeding through the Stage 2 gateway. These statements are provided on the basis that, where required, appropriate mitigations to the identified interactions listed above will be developed through on-going engagement during Stages 3 and 4 of the CAP1616 process. The statements provided by FASI South participants are replicated below.

London City Airport Statement, provided by the Head of Environment and Technical Operations on 16 February 2021: *"Based on the discussion we had in August 2020 on Manston's airspace proposals, London City Airport (LCY) agrees that mutual engagement has occurred between Manston Airport (ACP-2018-75), and LCY (sponsor of an ACP within the FASI-S programme), under CAP 1616. We discussed Manston's proposals and it was agreed that interactions between flight paths from and to both airports were unlikely below 7,000 ft. Assuming the proposals haven't changed since that discussion was held, LCY don't foresee any issues arising. If mitigations are likely to be necessary, LCY will welcome continual engagement with Manston. LCY therefore has no objection to the Manston Airport ACP proceeding through the CAP 1616 Stage 2 gateway."*

Biggin Hill statement, provided by the Operations and Technical Support Manager (and copying the Chief Executive Officer) on 11 February 2021: *"Following our bi-lateral meeting today, Biggin Hill Airport agrees that mutual engagement has occurred between Manston Airport (ACP-2018-75), and the Airport (sponsor of an ACP within the FASI-S programme), under CAP 1616. Biggin Hill does understand that there may be interactions between Manston Airport ACP and the Airport's FASI-S ACP. Both parties are confident that these interactions can be managed via continued engagement between Manston Airport and Biggin Hill Airport. Appropriate mitigations are likely to be developed through Stage 3 of this ACP, but there is no commitment to any particular design solution at this stage. Biggin Hill Airport has no objection to the Manston Airport ACP proceeding through the CAP 1616 Stage 2 gateway."*

NERL statement, provided by the Manager Operational Concepts, ATM Strategy and Service Design on 05 February 2021: *"Many thanks for the opportunities NATS have had to input to and comment on your ACP for Manston. NATS agrees that mutual engagement has occurred between Manston Airport (ACP-2018-75), and NATS (sponsor of the London Airspace Management Programme (LAMP), under CAP 1616. There will be dependencies between Manston Airport ACP and the LAMP deployment but both parties are confident that these can be managed via continued engagement between Manston Airport and NATS. Appropriate mitigations are likely to be developed, but there is no commitment to any particular design solution at this stage and therefore NATS has no objection to the Manston Airport ACP proceeding through the CAP 1616 Stage 2 gateway. We look forward to continuing the conversations and development activities in the future."*

Southend statement, provided by the Head of Air Traffic Services on 10 February 2021:
"*Following recent correspondence from Matt Ross and yourself I am pleased to confirm Southend Airport agrees that mutual engagement has occurred between Manston Airport (ACP-2018-75), and the Airport (sponsor of an ACP within the FASI-S programme), under CAP 1616. There may be interactions between Manston Airport ACP and the Airport's FASI-S ACP. However during bi lateral meeting thus far, both parties have been confident that these interactions can be managed via continued engagement between Manston Airport and Southend Airport. Appropriate mitigations are likely to be developed, but there is no commitment to any particular design solution at this stage. And therefore, I can confirm that the Airport has no objection to the Manston Airport ACP proceeding through the CAP 1616 Stage 2 gateway."*

2. Risk Assessment

Unresolved interaction impact			
N/A	**Low**	**Medium**	**High**
Risk of lack of co-operation from an interdependent sponsor			
N/A	**Low**	**Medium**	**High**

Please provide further details to support this risk assessment:

11. The Manston shortlisted options submitted at Stage 2 create several potential network interactions above 7000ft. within the Controlled Airspace managed by NERL. These interactions do not appear to conflict directly with existing airspace operations in the London TMA or NERL's future ACP designs. NERL and Manston have confirmed that potential solutions are available to resolve the dependencies that may arise from these interactions. ACOG expects the potential solutions to be further defined and evaluated, in collaboration with NERL, during the Full Options Appraisal in Stage 3 of the Manston ACP.
12. Below 7000ft, the Manston shortlisted options for departures and arrivals create several potential interactions with the existing airspace and future ACP designs associated with Southend airport. The most significant interactions concern outbound traffic from Southend routeing South towards Dover that may generate interdependencies with several of the Manston proposals below 7000ft. Southend and Manston have confirmed that potential solutions are available to resolve the dependencies that may arise from these interactions. ACOG expects the potential solutions to be further defined and evaluated, in collaboration with Southend, during the Full Options Appraisal in Stage 3 of the Manston ACP.

Please provide advice as to whether this proposal could proceed through the Stage 2 Gateway without creating unintended consequences for ACOG's work on the masterplan.

13. There is nothing of concern to ACOG or the affected FASI South participants from a Masterplan perspective at Stage 2 of the Manston proposal that should prevent ACP-2018-75 from progressing to the Stage 2 Gateway for a regulatory review.
14. Manston has provided evidence of ongoing engagement with Southend, London City, Biggin Hill and NERL and all parties have confirmed to ACOG that they have no objections to the ACP progressing into Stage 3 in the context of the Masterplan.

Confirmation that any relevant mitigation solutions will be assessed quantitatively during the full options appraisal in CAP1616 Stage 3.	**Yes**	**N/A**
	Confirmed	

Sponsor Rep: [redacted]	**Date:** 25/02/2021
ACOG Rep: [redacted]	**Date:** 25/02/2021