

STATEMENT in response to AC consultation for 3 long-term airport proposals

3 January 2015

TRA AirRailHub - indicative comparison of key UK hub proposals - 2 Feb 2015

Promotor		Thames Reach Airport				Airport Con	Gatwick	Heathrow Ltd		Heathrow Hub		
Type	unit	TRA-3w	TRA-4w	TRA-4L	TRA-6L	AC-4c	GW-2w	reference	HR-2w	HR-3w	HR-3L	HR-4L
	configuration	TRA-3w	TRA-4w	TRA-4L	TRA-6L	AC-4c	GW-2w	HR-2w	HR-3w	HR-3L	HR-4L	
	revision date	Jul-13	Jul-13	May-14	Jan-15	Jul-13	Nov-15	Jul-13	Nov-15	Nov-15	Jul-13	
	runways	3wide	4wide	2long	2long+2narr	2x2close pai	2wide	2wide	3wide	1w + 1long	2long	
Dimensions												
	runway separation	m	1520	1520	1800	1800/300	1900/750	1045	1420	1420/1045	1420	1420
	runway length	km	4	4	7.6/2	7.6/2 + 3	4	3.7	3.7	3.5	3.5 + 6.6/2	6.6/2
	ancillary/cargo area	km2	5	7	2	2	6	1	1	5	2	2
	operating hours	h	24	24	24	24	24	18	18	18	18	18
	operating mode		full mixed	full mixed	alternating	altern./mix.	mixed	full mixed	full mixed	alternating	alternating	alternating
Capacity												
	typical annual ATM per runway		429,240	429,240	429,240	429,240	429,240	321,930	321,930	321,930	321,930	321,930
	no of runways		3	4	4	6	4	2	2	3	3	4
	peak capacity (arrivals per h)		150	200	100	175	160	100	100	150	100	100
	runway configuration efficiency **		100%	95%	88%	65%	65%	100%	100%	100%	94%	88%
	nominal ATM		1,287,720	1,631,112	1,510,925	1,674,036	1,116,024	643,860	643,860	965,790	907,843	1,133,194
	use factor		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
	projected ATM		965,790	1,223,334	1,133,194	1,255,527	837,018	482,895	482,895	724,343	680,882	849,895
	aircraft load factor		175	175	175	175	175	175	175	175	175	175
	projected mppa		169	214	198	220	146	85	85	127	119	149
	additional air-rail substitution	mppa	20	20	20	20	10	3	5	5	5	5
	earliest opening year		2028	2032	2028	2030	2029	2026	existing	2026	2028	
Cost												
	new runway/terminal	£bn	21	26	25	28	25	10	15	10	14	20
	apportioned surface access	£bn	10	14	14	14	25	1	3	3	10	15
	new mppa		169	214	198	220	146	45	85	42	35	64
	£ per "new" mppa		183,417.57	186,843.03	196,662.90	191,154.79	341,347.84	244,444.44	213,001.05	307,668.19	692,686.35	544,958.83
Environmental												
	platform	km2	19	28	16	20	25	15	13	22	23	26
	property taken	no	0	indust.	100	100	1600	168	0	783	720	720+
	landtake (non-flood)	km2	1	2	1		4	0	0	0	0	7
	landtake (floodrisk)	km2	7	10	5		9	0	0	0	0	0
	intertidal (platform only)	km2	10	10	10		9	0	0	0	0	0
	deap water (platform only)	km2	3	3	0		3	0	0	0	0	0
	nature2000 (platform only)	km2	15	16	11		17	0	0	0	0	1
	noise polution (people) 57dB	no	1,000	2,000	1,000	1,000	1,400	25,000	260,000	260,000	300,000	
	noise polution (people) 57dB	net	- 230,000	- 230,000	- 230,000	- 230,000	- 230,000	15,000	0	-	40,000	
	air polution (people)	non	non	non	non	non	non	high	high	very high	very high	very high
Surface access catchment												
	population (staff) within 45min	mio	11*	11*	11*		9			14	17	
	population within 1h	mio	16*	16*	16*		13			16	18	
	population within 2h		35*	35*	35*		25			36	38	
Interventions												
	infrastructure			LNG move			LNG move			M25 tunnel	M25 tunnel	M25 tunnel
	heritage loss		0	0	0		8			30	8	
	SS Montgomery		x	x	x	x	x	x	x	x	x	x
Reference data based on AC long-term-options-sift-3, Dec2013 and Nov2014 publications and apportioned assumptions												
* higher estimate, due to more direct rail services with "Check-In-Train" ©												
** configuration loss to be analysed												

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This document discussed the following questions from Consultation Document - 25 November 2015 (AC01_tagged_amend_25_11_2014): <https://www.gov.uk/government/news/airports-commission-publishes-consultation-on-shortlisted-options-for-a-new-runway>

Q1: What conclusions, if any, do you draw in respect of the **three short-listed options**? In answering this question please take into account the Commission's consultation documents and any other information you consider relevant. The options are described in section three.

- n/a – we believe all three options are not viable for the long-term

Q2: Do you have any suggestions for how the **short-listed options could be improved**, i.e. their benefits enhanced or negative impacts mitigated? The options and their impacts are summarised in section three.

- n/a – we believe all three options are not viable for the long-term

Q3: Do you have any comments on how the Commission has **carried out its appraisal**? The appraisal process is summarised in section two.

- The overview table with aligned data (benefits, cost and risk) is missing. The document and its many sub-documents are very hard to assess. The main consultation document does not indicate the conclusions (only caveats), it is impossible to assess the findings without reading all fragmented documentation (4.3).
- The report is not actively considering a second additional runway. This is critical for the context of the current decision – otherwise the findings remain only a short term fix (1.9 and 1.10)
- The report is failing to dissect the role of hub vs. point to point traffic in the context of a new hub for London, under the guise of “letting the market decide”. The understanding of the risk of not building and integrating a main hub is a key element for the decision making process (1.11).
- The decision to drop ITE was taking on quantitative not qualitative arguments (... **the Commission concluded that such an airport would have substantial disadvantages that collectively outweigh its potential benefits. Cumulative obstacles to delivery, high costs and uncertainties in relation to its economic benefits contributed to an assessment that it did not represent a credible option for shortlisting.** (1.25)...) without a direct comparative and objective table referenced against the current schemes at Heathrow and Gatwick. The commission failed to identify any ITE showstopper issues. We call for a direct benchmarking (i.e. cost per mppa, top capacity, resilience, “door to seat” surface access speeds, equal PV and risk/optimism bias) of the now further developed 3 propositions against the much better integrated and futureproof Thames Reach Airport proposals.

Q4: In your view, are there any relevant **factors that have not been fully addressed** by the Commission to date?

- Air pollution (2.56): EU air pollution limits are already breached at today's operations. Air pollution and mitigation measures (cost of reducing pollution vs. cost of treating health symptoms) are not sufficiently considered
- Risk: risk of aircraft crash over densely populated areas are not considered

- Heathrow Hub capacity (3.139 and 3.98): end-to-end runways capacity of projected 700k ATM capacity appear over optimistic with most caveats not fully explained
- Air Rail substitution: No national integrated rail strategy considered, for a possible 20% reduction in overall domestic flights via air rail substitution. This would require a wider national transport strategy - see exemplary www.thamesreachairport.com/context/why-airrailhub
- Resilience: The general thrust of the study looks at value for money considerations and not infrastructure resilience. Integrated planning not sufficiently seen as important for a robust future proof integrated transport solution
- Surface access cost allocation not clarified sufficiently, i.e. HS2 seen/accounted as planned, whereby it will most likely be dependent on the location of the future hub capacity, i.e. HS2 is less likely if ITE or Gatwick get the go ahead. Unclear how HS2 or Old Oak Common and West link are accounted for
- Surface access travel time comparison not shown – i.e. longer travel times via external rail hub, full comparative door to seat travel times
- Land acquisition costs possibly underestimated
- Valuing environmental impacts – i.e. for air pollution, cost to NHS is considered, instead cost of mitigation measures (new road tunnel/rail link).
- ITE assessment: not completed – i.e. missing comparative table at same cost base (risk, bias, surface access cost apportioning)

Q5: Do you have any comments on how the Commission has carried out its **appraisal of specific topics** (as defined by the Commission's 16 appraisal modules), including methodology and results?

- See Q4 above

Q6: Do you have any comments on the Commission's **sustainability assessments**, including methodology and results?

- See Q4 above

Q7: Do you have any comments on the Commission's **business cases**, including methodology and results?

- See also Q4 above
- The multi-layered, caveated and fragmented assumptions do not allow a meaningful comparison and understanding of the various propositions.

Q8: Do you have any other comments?

- n/a

On behalf of Thames Reach Airport, London, 3.2.2015