

“This is further welcome argument in favour of the feasibility of having a new hub airport on the Isle of Grain. With many different proponents, the Isle of Grain ought to feature high on Sir Howard Davies’ short list at the end of the year.”

The Mayor of London – 19.7.2013

Submission to the Sir Howard Davies Commission

– 19.7.2013 by THAMES REACH AIRPORT Ltd.

Solutions for the long-term provision of aviation capacity for consideration by:

Airports Commission, 6th Floor Sanctuary Buildings

20 Great Smith Street, London SW1P 3BT

This submission updates the most recent work of Thames Reach Airport Ltd. The project outline enclosed is describing our proposals and activities to date and will be updated on our new website in regular intervals:

www.thamesreachairport.com

Table of Contents

Context.....	3
Why AirRailHub?	4
Timeline	6
Consultees.....	7
Research and development	8
Policy support	9
Project.....	10
Site	11
Surface Access.....	12
Modular components	14
Airport layout.....	16
Phased construction	18
Rail networks	21
Airspace.....	23
Safeguards.....	24
RISK safeguards.....	25
Innovations	27
Wider infrastructures.....	28
Programme	29
Budget.....	30
Benefits	31
Cost comparison	33
Contact.....	34

Context

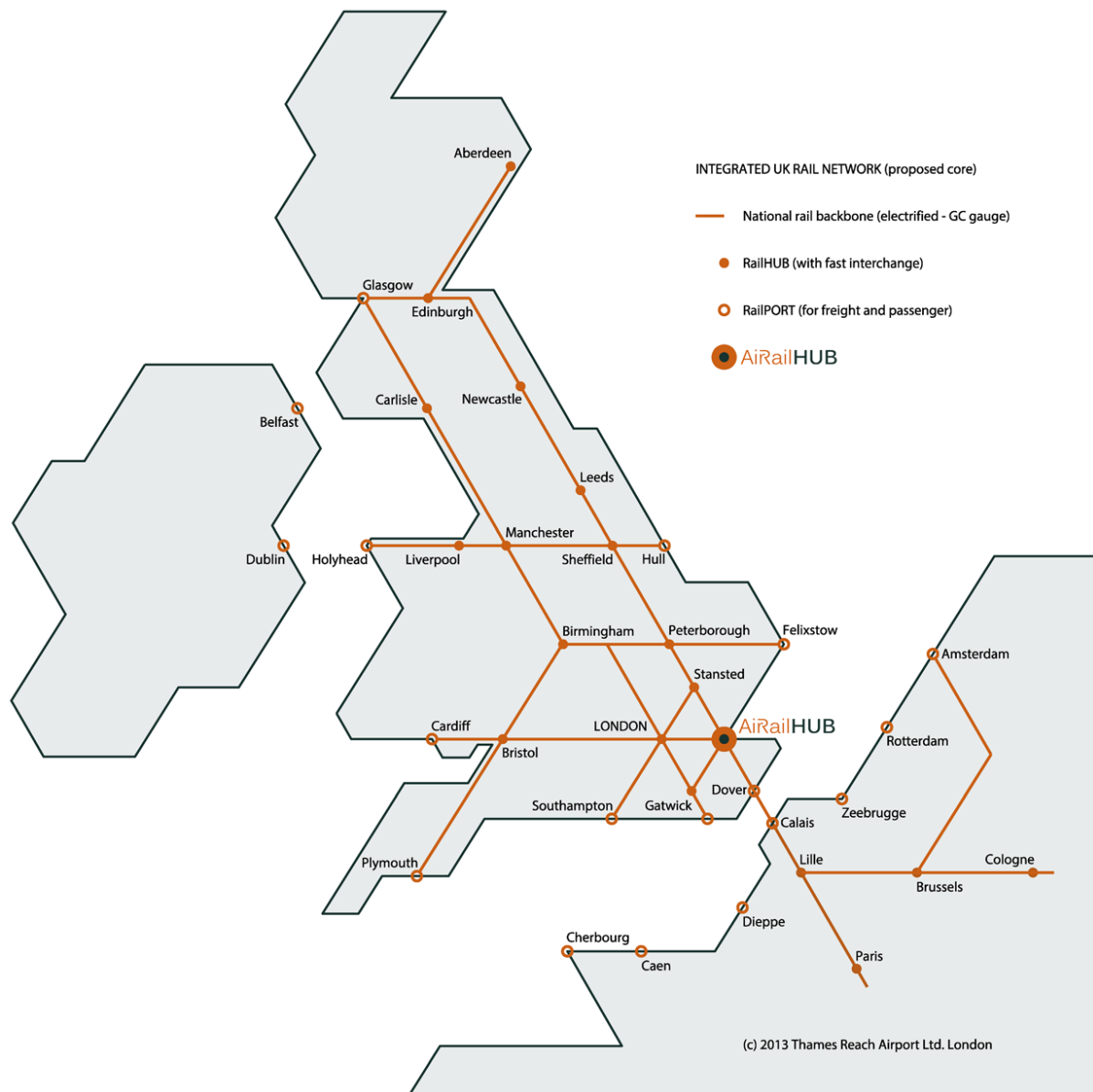
Thames Reach Airport is an independent private sector initiative, supported by leading UK consultants, whose key strategy for the provision of aviation capacity is to develop a modular, 24h AirRailHub in the Thames Estuary led by a multi-modal Lower Thames Tunnel under the Thames Sea Reach and flood defence for London. This document introduces the immense economic and environmental benefits of combining a hub airport with a Lower Thames Tunnel, flood storage and tidal power generation at the Hoo peninsular and the wider benefits for the Thames Gateway region and the continued growth of London and the step change of systematic rail integration. The proposals have been developed over the last ten years and have been consulted widely with all key stakeholders, including the SERAS consultation in 2003.

This integrated solution has been initiated by Bluebase in 2002 as “Thames Reach Airport”, and has formed Thames Reach Airport Ltd. to promote and develop the project. In addition Metrotidal Ltd has been launched in 2007, as a stand-alone business case for a Lower Thames Crossing solution, compatible with the integrated Thames Reach Airport proposals. While the need for a hub is a key driver for this proposal, the overarching benefit is clarity and joined up thinking for a new location in the Thames estuary, the ability to plan aviation and rail for the future. Doing nothing or keeping the existing with only small incremental improvements (i.e. 3rd runway in Heathrow) will grind future planning to a halt. Planes will continue to fly, but in an ever deteriorating transport infrastructure, due to lack of consensus and direction. Aviation and related infrastructure requires “a clear vision and commitment” set out by government. It cannot be left to market forces or short-term “value for money” considerations.

This project is based on the following principles:

- Government led integrated vision for the future
- Strongest possible rail integration (local, regional, national, freight)
- Balancing London and the South East
- Sustainable and innovative
- Flexibility for implementation and ownership

Why AirRailHub?



AirRailHub integration with the proposed UK rail backbone network

AirRailHub by Thames Reach Airport Ltd. not just provides aviation capacity for the 21st century, but also joins up wider infrastructure initiatives to form a truly integrated solution – connecting Britain for the future, nationally and internationally.

Maintaining a HUB!

Single hub! AirRailHub offers a high capacity and high peak capacity aerodrome with 24 hour operation. An initial single site 3-wide spaced runway airport with future expansion options, provides clarity for the long-term planning and rationalises the currently fragmented long-haul market in the Southeast for a leaner and better connected hub.

Locating on the HOO!

Balancing proximity! The Hoo peninsular offers large open land near the biggest aviation market in the world and close connection to existing and proposed high-speed rail connections, with good workforce and accommodation available in the Thames Estuary area.

Integrating RAIL!

Our fourth runway is high-speed rail! A direct and extensive rail service network is vital for the efficiency, comfort and environmental protection to substitute as many as possible journeys to and from the AirRailHub. Further comparative proximity (door to seat) is much improved, due to removing transport interchange losses.

- 10-20% of feeder flights can be replaced by direct intercity rail, from UK cities and across the channel.
- 75% of surface access from the London area can be serviced via Crossrail+, express and high-speed rail with “on-train-check-in” facility.
- 75% of commuter traffic can be serviced by public transport, with direct regional rail services being offered.

Timeline

2002 – Thames Reach Airport project initiation

Bluebase Architects London commit to develop a private sector surface access led airport proposal at the Hoo peninsular to be submitted for the 2002 SERAS consultation – branded Thames Reach Airport. To support the scheme development, an extensive number of consultation and workshop meetings were held with relevant industries and stakeholder.

2003 – SERAS submission and assessment

The Thames Reach Airport proposals are submitted to second stage SERAS consultation, widely published in the national media and presented to the Aviation All-Party Group of the House of Commons chaired by Francis Maude. Halcrow assess the proposals in detail on behalf of the DfT.

2004 – Stand-alone Thames Reach Tunnel proposition

Following the SERAS conclusion to “do nothing”, Bluebase started to also promote Thames Reach Tunnel as a stand-alone business case to relieve Dartford crossing with wider benefits.

2005 – Thames Reach Tunnel and tidal power

Further development on the stand-alone Thames Reach Tunnel case and the development of tidal power integration. Presentation at the Thames Gateway Forum.

2006 – “Island” Thames Reach Airport

Bluebase presents Thames Reach Airport, now closely integrated with a tidal pool system, at the TCPA conference in Manchester, chaired by Sir Peter Hall.

2007 – Consultation with M3 Group

Further development on Thames Reach Airport and consultation with Justine Greening MP for the 3M Group.

2008 – Incorporation of Thames Reach Airport Ltd.

Modelling of the Lower Thames Crossing road links by Space Syntax. Further consultation and meetings with PLA, Kent, Essex, RSPB, Thames Gateway, Crossrail, Justine Greening, Bernhard Jenkin, John Olsen, Halcrow and Volterra. Dedicated website for Thames Reach Airport.

2009 – Thames Reach Airport at Isle of Grain with flood storage system

Presentation of Isle of Grain airport at ICE conference. Meetings with Douglas Oakervee, Nick Raynsford. Workshops with HR Wallingford, CAA, Alain Chiaradia, TideTech.

2010 – Larger scale Tidal power schemes and TRA letter to TEG

Letter to Sir David King (TEG) setting out the principles current Thames Reach Airport proposals at the Isle of Grain.

2011 – Restructuring and IP

Meetings with Lord Berkley re rail freight. IP review.

2012 – AirRailHUB proposals

AirRailHub proposals re-cast for publication. Renewed consultations with GLA and DfT.

2013 – Consultation with Moylan and Davies commissions

Further development of 4+ runway scheme options. Consultation with Moylan and Davies Commission. Launch of 2013 AirRailHub website.

Consultees

The Thames Reach Airport consortium has consulted since 2002 with a great number of key stakeholder to review and improve the proposals:

- Politicians – Justine Greening, Bernard Jenkin, Nick Raynsford, Daniel Moylan, Aviation All Party group (Francis Maude), George Osborne,
- Civil Service – NATS, CAA, DfT, Crossrail, Davies Commission,
- Environment – RSPB, Environment Agency, TC2100,

- Consultants – HR Wallingford, Scott Wilson, Halcrow, Capita Symons, Volterra,
- Think tanks – SERAS, TCPA,
- Local government – Canvey, Medway, South End, Tilbury, Gravesend, Essex CC, Kent CC,
- Industry – BAA, Port of London, Port of Tilbury, Shell Haven, Lafarge, ABI, Bechtel, Star Alliance
- Press – BBC, Sunday Times, Economist, Guardian, Telegraph, Evening Standard, Essex Echo,

Research and development

The Thames Reach Airport consortiums on-going R+D efforts:

- Site surveys
- Political/media surveys
- Technology reviews
- Market research
- Aviation and rail logistics
- Hydrodynamic research (Eurostars application shortlisted)

Thames Reach Airport has identified from early on a great number of integrated transport solutions focused on the South East and has developed a joined up strategy to address most of the findings for the growth and sustainability of London and the South East:

- Thames Gateway Communities Plan,
- Thames Gateway Freight Study,
- London Orbital Study,
- Stansted/M11 corridor,
- Lois (London to Ipswich Multi-modal Study),
- London Gateway Container Port,
- Crossrail
- The East-Coast High-Speed Line
- London's flood defences
- Dredging the Thames Estuary shipping channels
- London eastern sea defence
- The Government's Renewables Obligation

Policy support

Thames Reach Airport encourages the following policy initiatives for a holistic aviation and transport solution:

- EU Emissions Trading System ETS and future inclusion of surface access component (door to door carbon use) – towards a global agreement
- VAT – based on global agreement
- Single European Sky (SES) and Single European Sky ATM Research (SESAR)
- Air Passenger Duty APD – subject to overall policy
- Greener aviation – active aircraft taxiing, larger more efficient aircraft,
- Integrated rail networks in UK and EU

Thames Reach Airport advocates a two staged decision making approach:

1. Expert “Eastern Alliance” to enable an evidence-based decision, independent of a political influence - to assess alternatives for an integrated solution.
2. Parliament decides based on the “technical” findings with a broadest possible political consensus.

Project

The AirRailHub proposal by Thames Reach Airport is a step-change in infrastructure planning, not only providing 24h aviation capacity, but also an integrated wider national transport infrastructure and long term coastal protection. This is achieved by integrating a new hub airport with the improved national rail network at the Hoo peninsular to connect Britain for the future:

Airport and rail integration

- Air/rail substitution: up to 20% fewer feeder flights
- Car/rail substitution: up to 60% fewer car journeys to the airport (for travellers and staff)
- Freight mode shift to rail, currently trucked from the continent and ports

Integration and wider infrastructures

- Use of existing road and rail corridors with just 40km new roads and rail corridor constructed
- Use of existing industrial and flood risk land with no loss of housing
- Lower Thames Crossing and flood defences for London

Phaseability of the proposals

- Clear vision achieved and secure master plan
- Future proof with possibility of 4 and more runways
- Phased environmental impacts and capital investment to track demand

Site

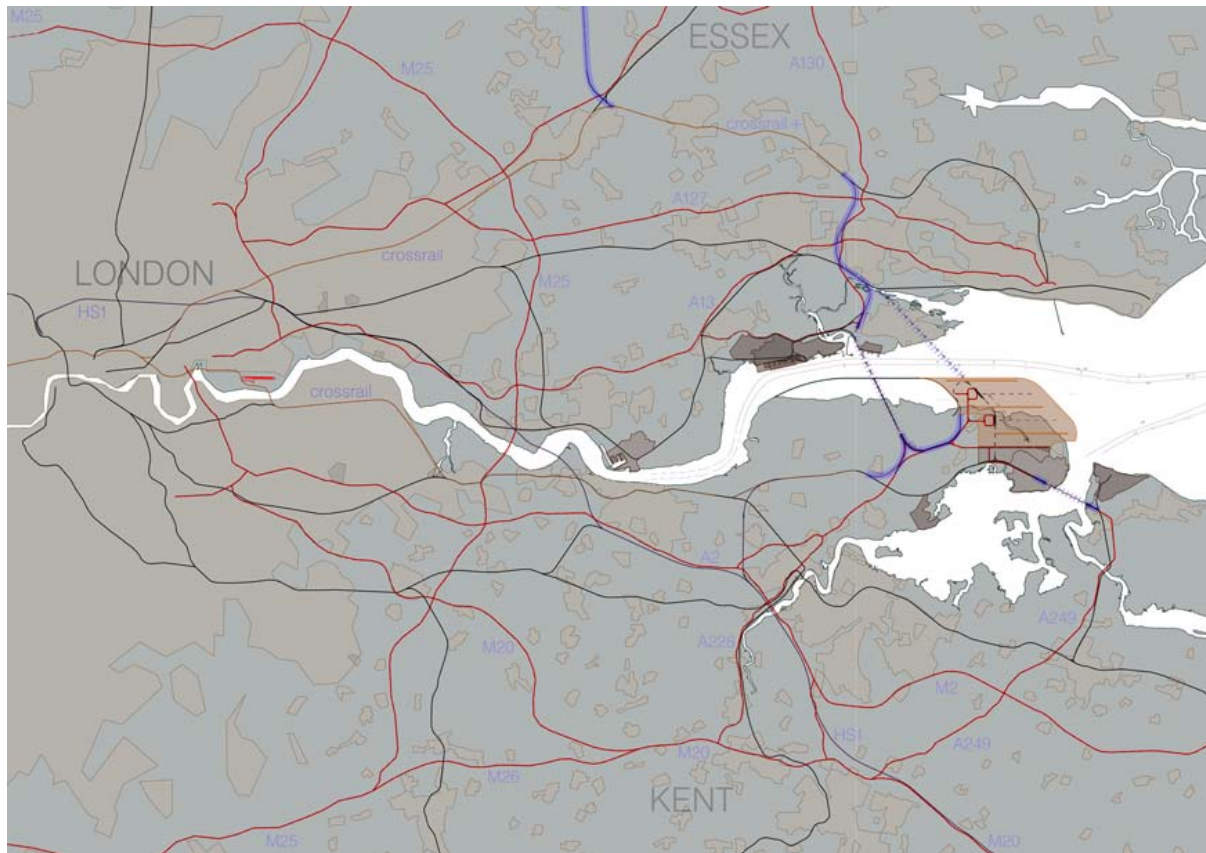


Isle of Grain - aerial view

The Thames Estuary at Hoo peninsular offers the space for a future international hub:

- Sufficiently far away from built-up residential areas for 24h operation
- Sufficiently close to large number of existing rail and road transport corridors
- Level brown field and flood risk land
- Surveyed by English Heritage

Surface Access



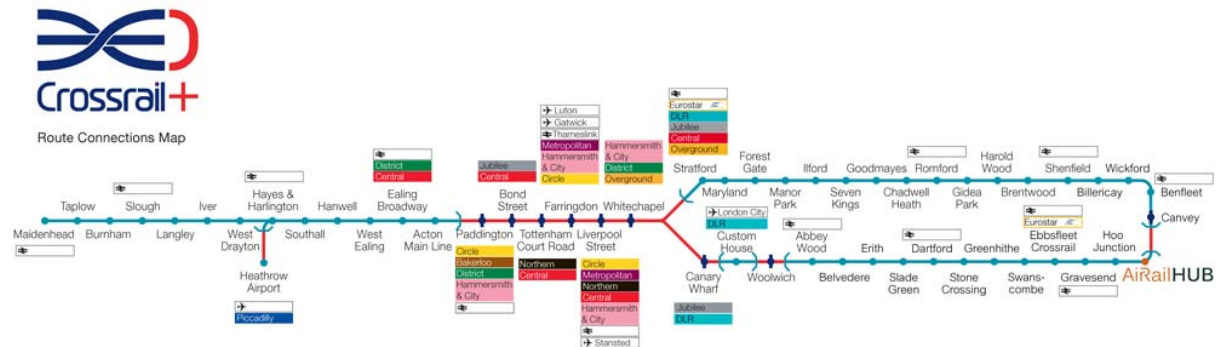
Rail and road surface access

The multi-modal Lower Thames crossing between Canvey and Hoo and later Grain and Sheppey connects the existing radial road and rail networks north and south of the Thames with short new above ground transport corridors (blue outline). This not only connects a new airport efficiently, but also offers vital agglomeration benefits to Essex and Kent and much needed redundancy to the national traffic flows between the South-East (continent) and the Midlands. A third dedicated rail tunnel offers direct rail routes through the AiRailHub:

- Making best use of existing rail (black) and road (red) corridors
- Integration with existing transport infrastructure and initiatives
- Offering wider benefits to local communities

Key routes:

- Crossrail+ (orange)
- High-speed rail link between the North and the Continent, via AirRailHub and Stansted
- Express rail into London
- Commuter rail links between Essex and Kent
- Freight bypass to east coast ports

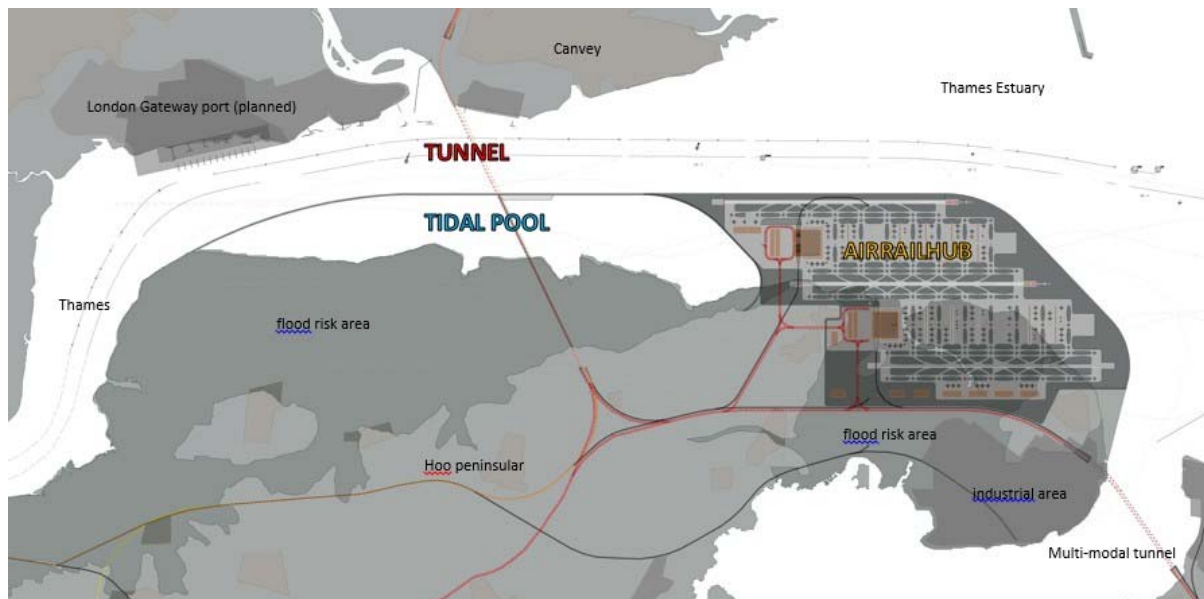


Crossrail+ map with AirRailHub station

New construction:

- 10km new road corridors
- 10km new rail corridors (blue)
- 25km Essex cross country (blue)
- Upgrading of existing routes to match demand

Modular components



Three modular components on the Hoo peninsular

AIRRAILHUB

- 25km² platform – 8m above sea-level
- Three (or four) wide-spaced runways aerodrome
- Two CTA's with 12 satellites and VIP and cargo area
- Two 10 track railway stations
- Direct Crossrail and HS1 access
- Dedicated cargo and Business Park
- Fast interchange

RAIL NETWORK ("Check-in-Train" integration)

- Crossrail+ service
- High-speed service – direct to London, Paris/Brussels, Birmingham, Manchester, Leeds
- Regional rail service to Essex and Kent

TUNNEL (Metrotidal)

- Multi-modal tunnel (Canvey – Hoo peninsular)
- 4km immersed tube tunnel + 4 km cut and cover tunnel
- D2 road tunnel with central emergency tunnel
- T2 rail tunnel mutual emergency tunnel arrangement
- Road and rail links
- Utility way leaves

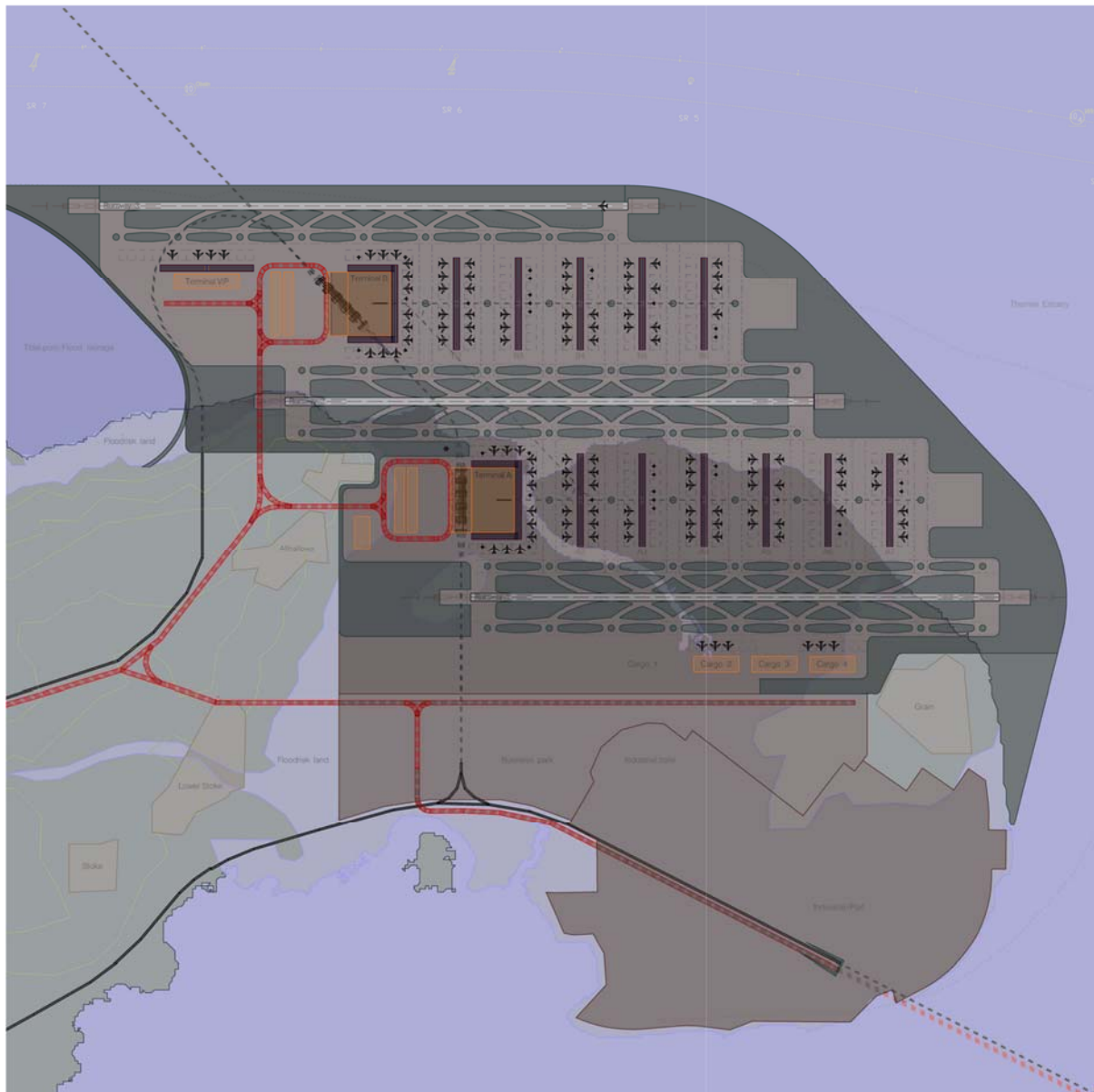
TIDAL POOL (Metrotidal)

- Dredged pool with 10m embankment (Eastern)
- Natural pool with 8m embankment (Western)
- Extensive emergency overflow areas (flood risk zone)
- 20MW dual pool tidal power plant with pump storage
- Active flood storage controls
- Bird strike control
- Upstream intertidal mudflats protection

SUPPORTING INFRASTRUCTURE

- Bird sanctuary and environmental remediation
- Industrial zone
- River dredging and flood defence dams
- Relocation of farms/businesses

Airport layout



AirRailHub layout (3 wide-spaced runways) and associated development areas (brownfield)

General airport construction

- 25km² aerodrome platform - 8m above sea level
- Built almost exclusively on reclaimed and flood risk land
- Hydrodynamic and navigation channel neutral
- Phased construction to reduce impacts
- Locally sourced materials
- Integrated with tidal pools
- Adjacent 10km² brownfield growth area

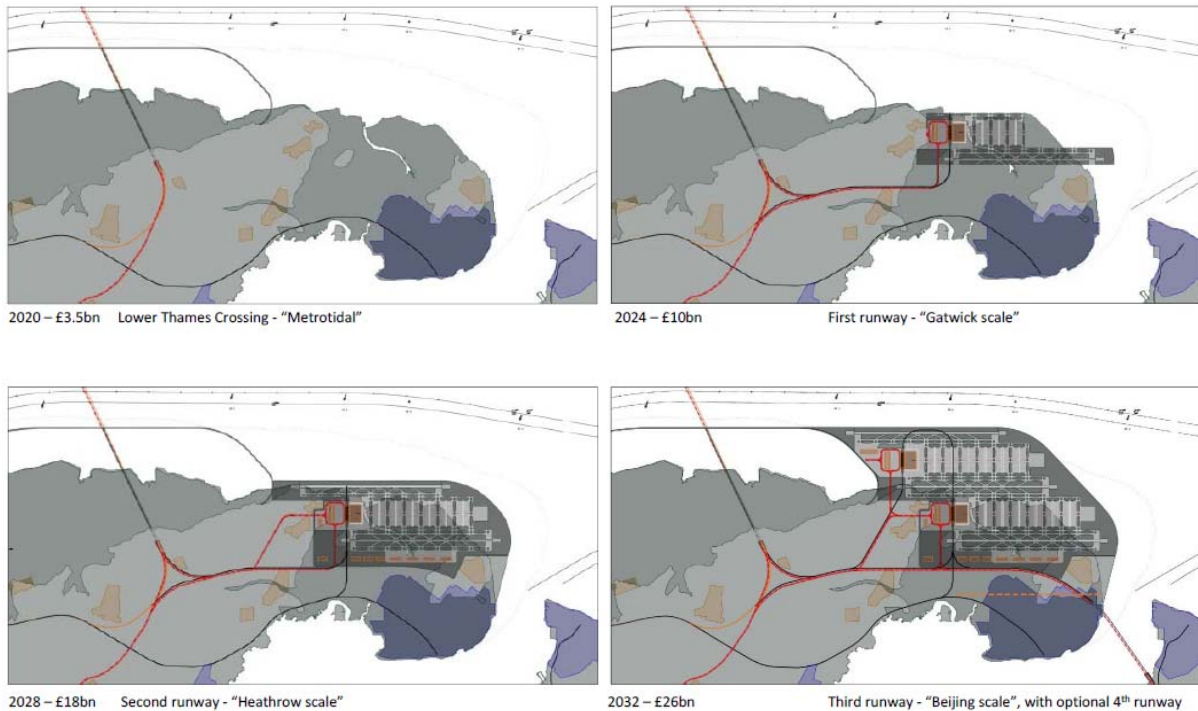
AirRailHub (3 wide-spaced runway configuration)

- 3No 4km runways, widely spaced at 1520m
- 2No CTA's with 10 track train station each
- 14No satellites (total 20km stands) with airside fast track links
- Dedicated terminals for airline alliances
- 1No VIP terminal
- Cargo terminals
- 180 mppa peak capacity at 24h operation
- Optional expansion - 4th wide-spaced runway possible or more

Surface Access

- Direct high-speed rail connections (to London, Paris and Midlands)
- Check-In-Train service with train platform luggage drop-off
- Dual routes to central London (redundancy)
- 60+% rail use (staff and passengers)
- Use of existing transport corridors
- Direct interchanges with short walking distances throughout the system
- Dedicated rail tunnel to the North

Phased construction



Incremental development of 3 wide-spaced runway hub airport capacity

The four key stages illustrate the alternative phased development potential for Thames Reach Airport:

- 2020 – Metrotital tunnel and flood storage to offer Dartford Crossing relieve and flood protection
- 2024 - First runway for early new aviation capacity with limited environmental impacts
- 2028 – Second runway for large international airport operations
- 2032 - Third runway for premier hub operation
- beyond – Fourth and more runways – see extended proposals

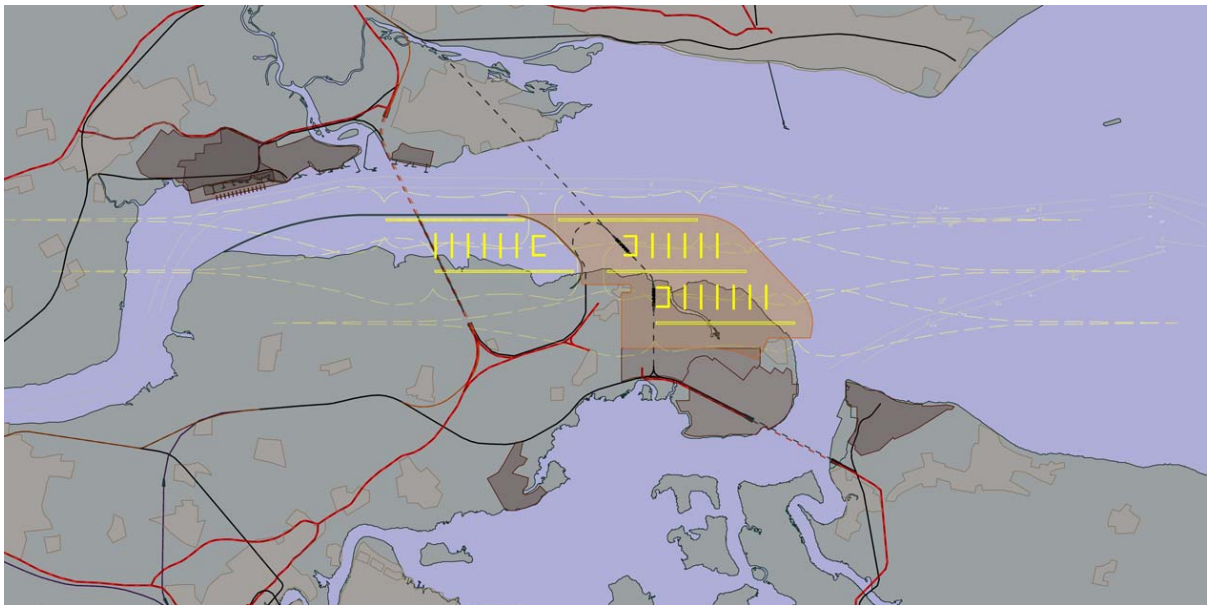
Extended proposals (4th runway)



4th optional runway South

The 3 wide-spaced aerodrome layout can be extended to the South with a 4th wide-spaced independent runway and a 3rd CTA above a rail terminal.

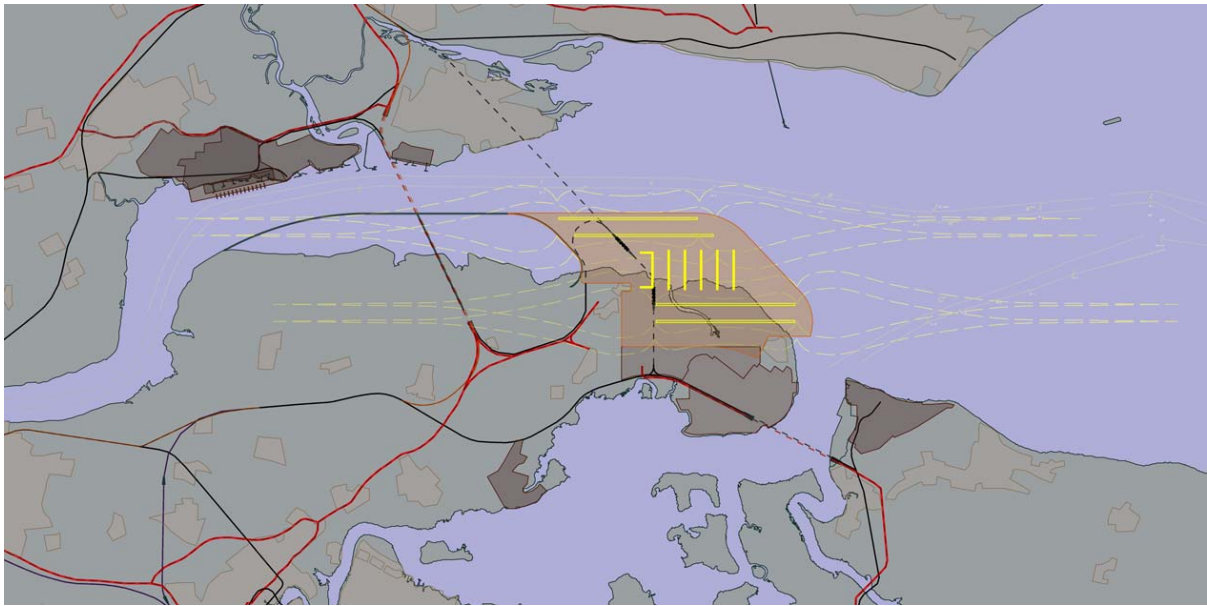
Alternative extended proposals (4th and 5th runway)



4th and 5th optional runways West

The 3 wide-spaced aerodrome layout can be extended to the West with a further wide-spaced runway pair to offer 5 runways and 3 CTA facing the rail terminals. For reduced impact on the Hoo the 3rd runway (South) can be installed last, with the airport initially operating with 4 runways almost entirely located on reclaimed land in the Thames.

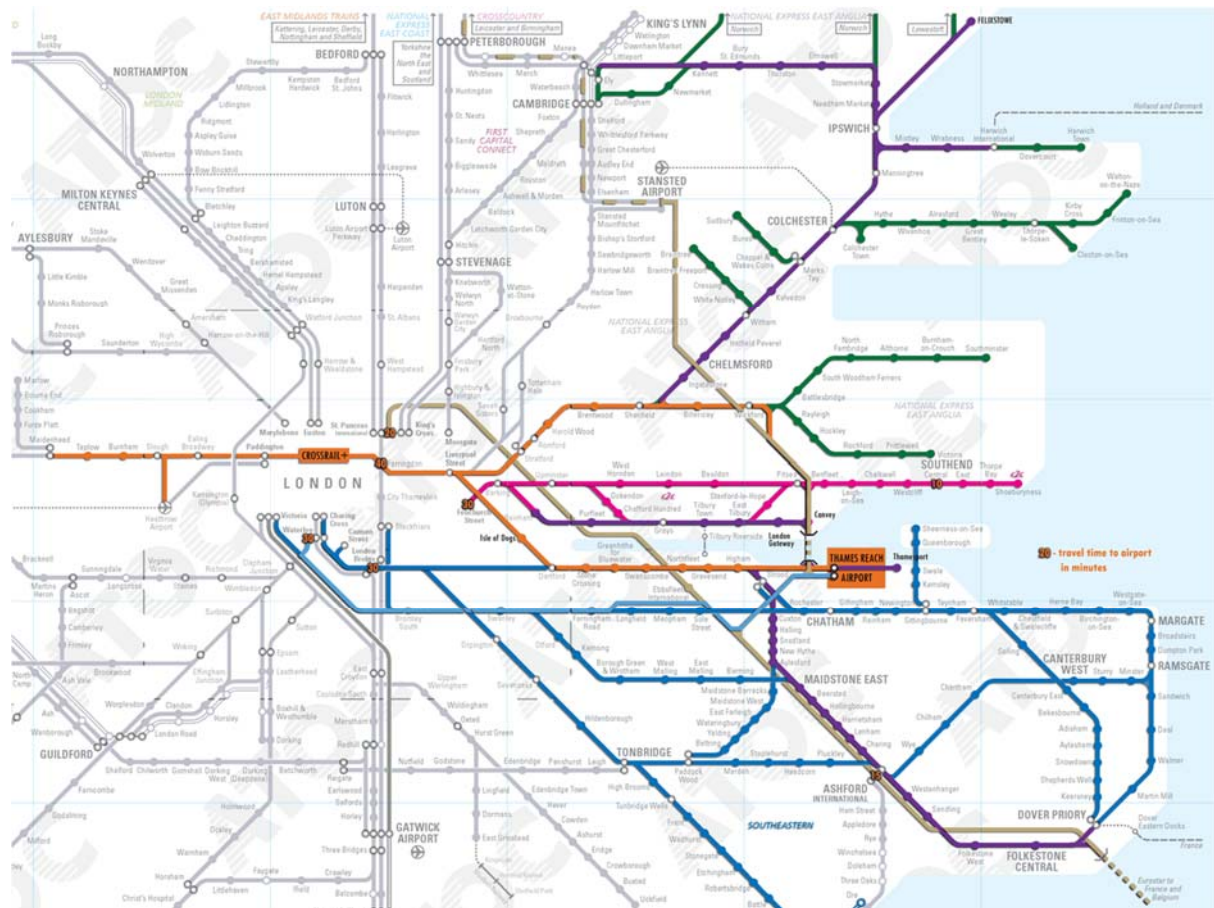
Reference proposals (two narrow-spaced runway pairs)



4 runway layout with 2 narrow-spaced runway pairs

Typical 4 runway arrangement with 2 narrow-spaced runway pairs and wider in-field for reference.

Rail networks



Rail network and key services (in min.)

Thames Reach Airport is closely integrated with local, regional, national and international rail services – offering highest public transport surface access provision of well over 60%.

Rail networks

- “Check-in-trains” (with on-board check-in)
- High-speed rail link to Central London
- Direct “feeder” intercity trains (air-rail substitution)
- Extensive commuter rail connections for staff – into Essex and Kent
- New rail lines: Kent 10km, Essex 5km (+25km cross country)
- Upgraded rail lines: Kent 30km, Essex 10km

Rail services (with indicative travel times)

High-speed Rail (gold)

- London St Pancras - 20min
- Paris – 2h
- Birmingham - 2.5h (HS2 direct)
- Cardiff – 3h (Intercity direct)
- Manchester – 4.5h (HS2 or Peterborough direct)

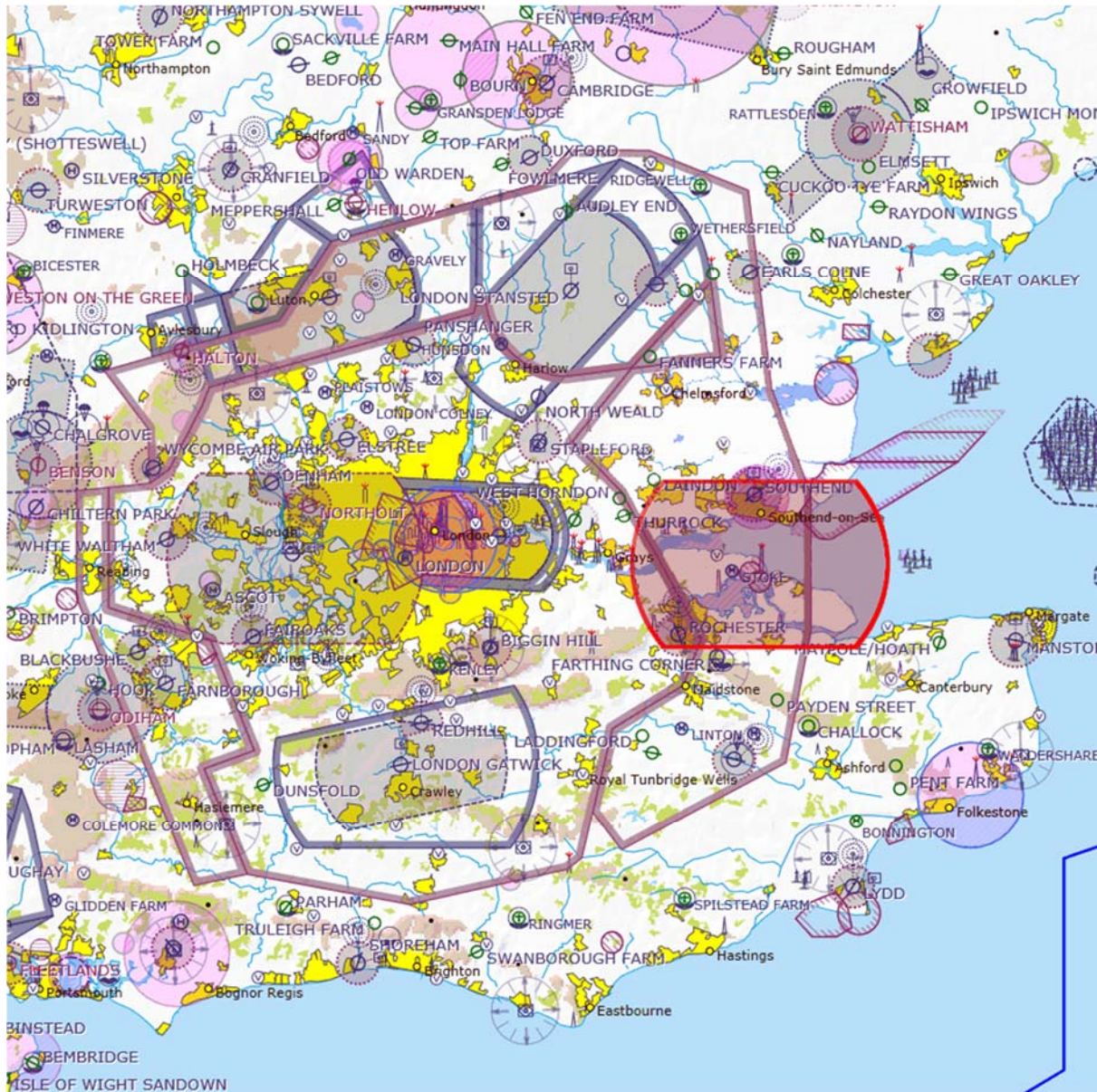
Regional Rail

- Southend – 10 min
- Medway – 7min
- Ashford - 15min
- London Bridge – 30min (Express train)
- Fenchurch Street – 30min (Express train)
- Central London – 40min (Cross Rail)
- Waterloo Station - 30min (former HS1 line)

Freight rail

- Eastern bypass (LOIS Study) W11 (CG) gauge access between UK and continental Europe

Airspace



Indicative airspace overlay (base map by skydemon.com)

The airspace over London and the Southeast is one of the most congested in the world and placing a new hub airport infrastructure will impact substantially on the existing flight paths and will require a redesign of the existing system. A new airspace design will also take into account the degree of retained capacity at Heathrow and the Single European Sky (SES) initiative to replace the existing national air traffic control systems with a Europe wide seamless system.

Safeguards

NOISE safeguards



Indicative noise contour

The aerodrome positioning avoids any overflying of densely populated area with the 57dB noise contour only covering open water, marshes and industrial areas.

- Flight paths over open water and marshes
- Cliff/TRA distance identical to Windsor Castle/LHR
- No conurbation within the contour, besides Allhallows and Cooling (indicative only)

- No noise pollution above background in cities (Southend, Canvey, Rochester, Basildon)
- Surface access follows existing transport corridors
- New transport corridors in tunnels or cuttings

RISK safeguards



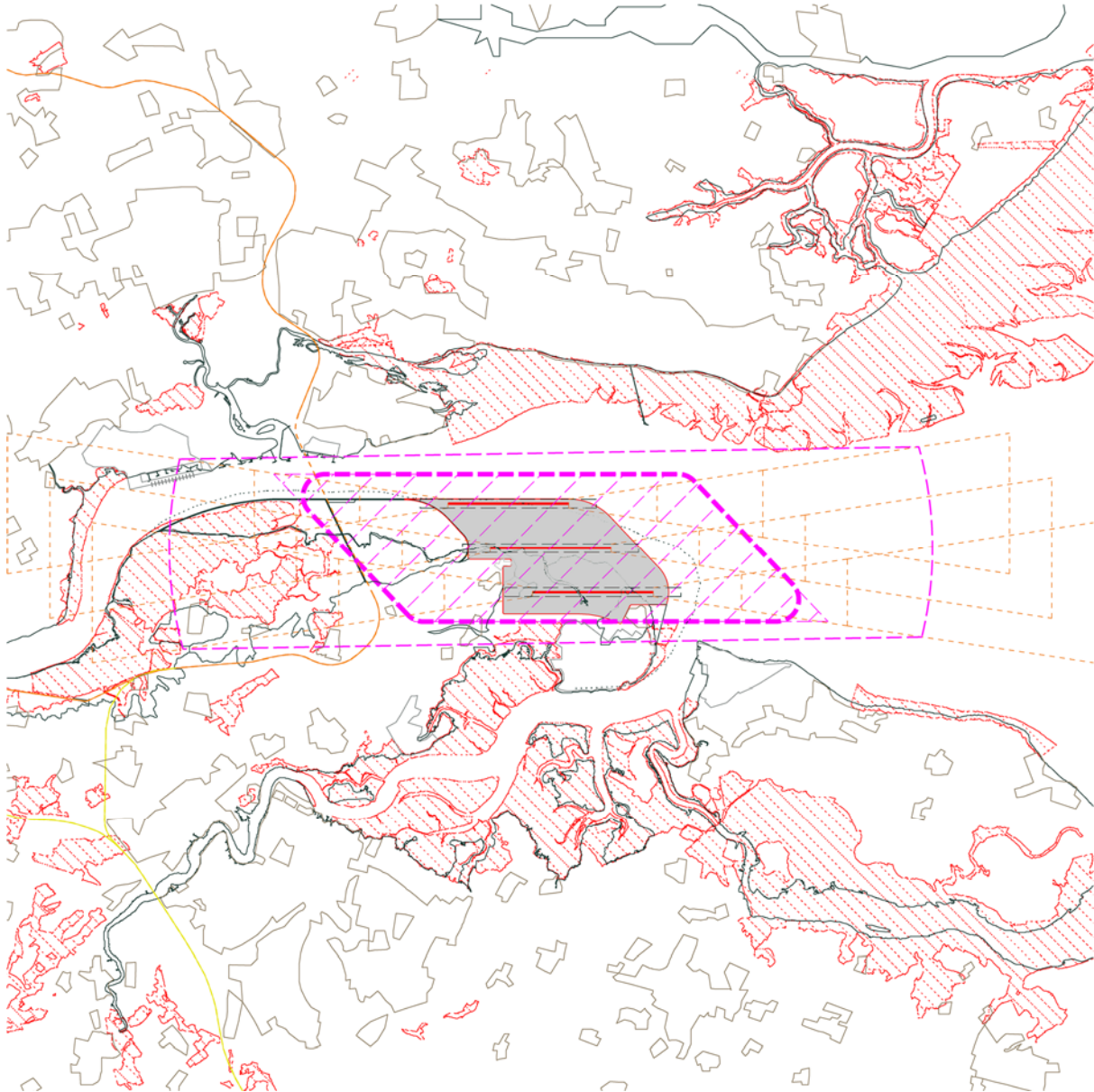
Indicative risk contour

An aircraft crash is statistically most likely during the take-off and landing as indicates by the public safety zones. Public Safety zones are almost exclusively over open land and open water, offering a best protection for the local population.

- MS Montgomery legacy action plan

- Relocation of LNG plant over next 10 years
- Phasing out of power plant over next 10 years
- Navigation channel action plan
- Strategic pipeline action plan

BIRDSTRIKE safeguards



Active bird strike protection zone

In the active bird strike protection zone, Thames Reach Airport will make use of a fully automated 24-hour detection system for bird strike control, placing emphasis on the harmless denial of access to bird life rather than the destruction of their natural habitats. The automated system working in tandem with a 20-year programme for bird management and the

creation of alternative habitats along the eastern seaboard will reduce the risk of bird strike to the levels experienced elsewhere in the UK.

- Early habitat relocation, prior to aerodrome construction
- Maintaining net bird habitat provision
- Protecting local habitat
- Radar based active bird dissuasion system
- Bird strike risk comparable to international standards
- Early closure of all Thames Estuary land fill sites

Innovations

Thames Reach Airport is introducing a number of innovations and best practices to the project to further promote a step-change for the provision of an integrated infrastructure solution.

Check-In-Train ©

Most rail services to access the AirRailHub will offer on-board self and assisted check-in:

- 1st class: An attendant will issue a boarding pass at your seat and collect your hold luggage
- 2nd class: Each train coach will offer self-service check-in terminals (as provided currently at the airport) - with easy access luggage drop-off on the arrival train platforms

All trains will be linked with the check-in system and departure scheduling, offering up to date information for each passenger on the way to the airport and notification of delays. This will offer a unique hop-on service, saving vital check-in time at the airport, peace of mind and comfort on route to the airport.

Airport – Lower Thames Crossing – Flood defence

The proposals are combining the independent but compatible infrastructure initiatives to unlock substantial synergy effects:

- Dual tunnel use = airport surface access + agglomeration benefit for Essex and Kent
- Dual pool use = Flood storage + pump storage / power generation

Wider infrastructures

The core proposals will be complemented by a number of related infrastructure initiatives, leveraging the core Thames Reach Airport proposals:

RAIL

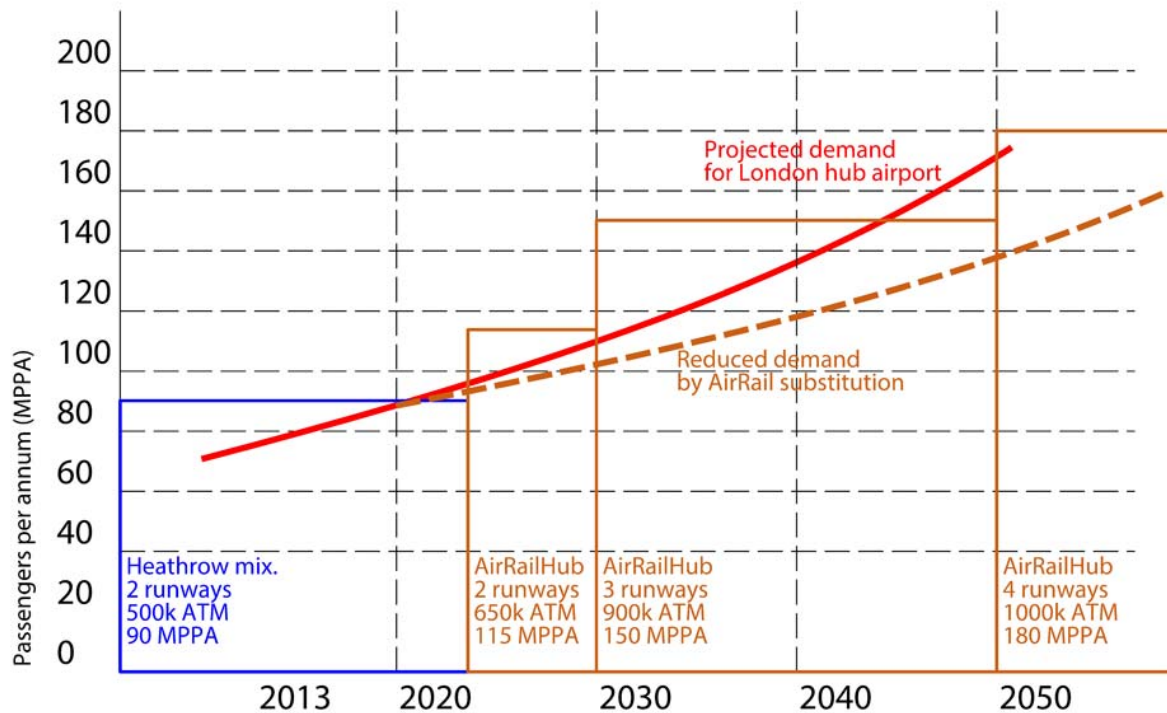
- “Eastern spine” – upgraded East coast mainline via LTX to Channel tunnel to form part of a national single homogeneous network with gauge and electrification for continuous through services – see Why AirRailHub.
- New rail services linking Essex and Kent
- Stansted to Ebbsfleet (HS1) rail service

THAMES ESTUARY

- Flood defence for London
- Tidal power generation with pump storage
- Dartford crossing relieve
- Ancillary Housing development
- Eco data centre – Powered and cooled by water
- Utility way leaves via LTX – Water, Power, Data
- Relocation of bird sanctuary

Programme

Indicative phased capacity for Thames Reach Airport

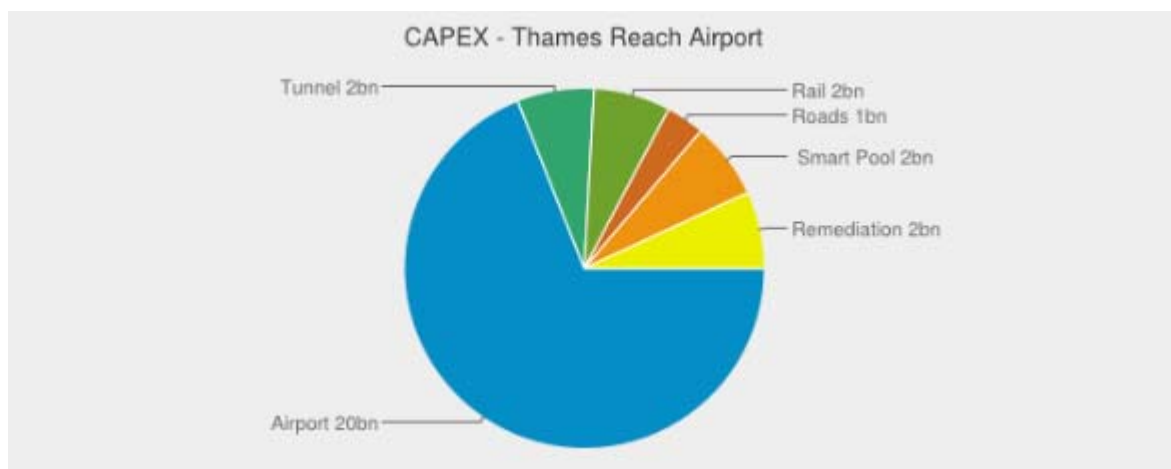


Indicative phased capacity

Thames Reach Airport can be phased to follow the demand with sufficient redundancy for reliable operations:

- A new 2 runway airport can offer sufficient capacity to move the London hub airport in 10 years from Heathrow to the Isle of Grain, with spare capacity due to more flexible operations.
- A further runway provides additional capacity up to 2050, together with reduction of overall demand by AirRail substitution.
- A possible fourth runway will secure efficient operations for the future.

Budget



Operator structure

The illustrative cost and operator structure not just includes the airport budget, but also the wider infrastructure initiatives proposed. It also indicates a possible mix of distinct public and private ownership structures. This offers flexibility for robust business cases to support the proposals.

Operator structure of TRA integrated solution						
£bn	Components	Regulator	owner/operator (options)			
			A.	B.	C.	D.
20	Airport	CAA	TRA	BAA		
3	Tunnel	DfT	MT	Dartford	TRA	
0.5	HS1 link	NR	Network Rail			
0.5	Essex cross country	NR	Network Rail			
0.2	Rail cords	NR	Network Rail			
0.5	GC gage corridor	NR	Network Rail			
0.1	Crossrail+	NR	Crossrail			
0.01	Express train	NR	Franchise			
1	Road links	DfT	DfT			
1	Flood defences	Env.Ag.	Env.Ag.			
1	Pool	Env.Ag.	Env.Ag.	MT	EDF	TRA
0.3	Tidal power	Power	MT	EDF	TRA	
1.5	Sheppy Tunnel	DfT	MT	Dartford	TRA	Medway
0.2	Business zone	Medway	Private	TRA		
29.81						

Illustrative cost and operator structure 2012. All pricing indicative only.

Benefits

To the traveller – “fast and direct”

- Fastest access from London to boarding gate (comparative proximity)
- Low cost of travel, due to unconstrained capacity
- 21st century travel experience with “check-In-train” service
- 24h intercontinental access
- Widest and deepest network of destinations
- Interconnected and direct rail system

To the airlines – “best for interlining”

- No constraints on slots
- Dedicated and scalable terminals for airline alliances
- Fast turnaround times
- Resilience
- 24h operation

To the staff

- Rail based commute
- Broad catchment area
- State of the art work place

To regional UK airports

- Direct connection to Stansted, Gatwick, Birmingham and other airports via direct rail
- Transparent two tier aviation system, with national hub champion and liberalised regional airports
- Deregulated market – no or level landing charges, fifth freedom rights, Council Regulation (EEC) No 95/93 of 18 January 1993
- Generally improved rail surface access connections – via better network and franchises

To the UK – “intermodal gateway to the World”

- Future proof, with 3 times the capacity of Heathrow,
- Policy clarity and scalability
- Greater flexibility to sign Air Service Agreements with foreign states

To the environment – “rail is our fourth runway”

- Net reduction in flights (up to -20%) – pooling flights and interconnecting with rail
- Net reduction in car journeys (up to -60%) – widest direct commuter rail network
- Green architecture and operations
- Air pollution not to impact local community due to island location
- Phased development impacts

To the local community – “green and interconnected”

- Reduced local development due to remote operations via rail connectivity – spreading development over wider south east and not around the perimeter as far as possible
- No homes lost
- Wide ranging employment opportunities

To the taxpayer – “private sector funded airport”

- Cost neutral for the airport development (subject to moving Heathrow hub operation)
- Wider rail improvements, part of incremental upgrade and maintenance of existing rail network
- Lower Thames crossing part of Dartford crossing improvement programme
- Flood defence (tidal power) via TE2100 programme and power generation

Cost comparison

Thames Reach Airport offers the highest peak capacity, flexibility and wider benefits at a lower cost compared to alternative proposals. This is mainly due to:

- Lower land prices and available space in the Thames Estuary (flood risk land, brown field sites and open water)
- Operational synergies with associated infrastructure projects – LTX and flood defences
- New-build AirRailHub vs. extending a live airport in a built-up area

Here an illustrative cost comparison with an expanded Heathrow:

Indicative Cost Comparison*

	Extended Heathrow (3rw.+HS2)	130+mppa (16h)	Thames Reach Airport (AirRailHub)	160+mppa (24h)
Ver.18-7-13				
Airport	Cover over reservoirs/M25 1 Runway Extend terminals with shuttle Aprons and satellites Cargo	£12bn	25km2 platform (+8m NN) 3 Runways (wide spaced) 2 Terminals with rail Aprons and satellites Cargo	£20bn
Associated infrastructure	HS rail interchange and links	£5bn	Lower Thames Crossing (rail + road) – total £2bn	£1bn**
Surface access	Local road & rail improvements	£3bn	Local road & rail improvements (Ebbsfleet to Stansted)	£1bn**
National rail link	HS2 (total £44bn)	£3bn**	Essex cross country (Stansted link)	£1bn**
Flood defence	n/a		Flood storage/tidal power (£2bn)	n/a***
Remediation	Noise/air pollution, environ.	£2bn	Bird sanctuary/ LPG terminal	£2bn
Gross development cost		£25bn		£25bn
Purchase of Heathrow	12km2 land + assets	£15bn	12km2 land + assets	£15bn
Purchase of new land	10km2 land (Heathrow West)	3bn	25km2 land (Hoo East)	£3bn
Sale of existing land	n/a		12km2 land (existing Heathr.) – for new town/1rw. airport	-7bn
TOTAL		£43bn		£36bn

* Indicative costing for comparative illustration only, and subject to detailed assessment

** Indicative apportion of costs to aviation proposals

*** Cost not included for direct comparison (Flood defence)



Fly-past

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