

91243R



Level 2 Geography, 2013

91243 Apply geography concepts and skills to demonstrate understanding of a given environment

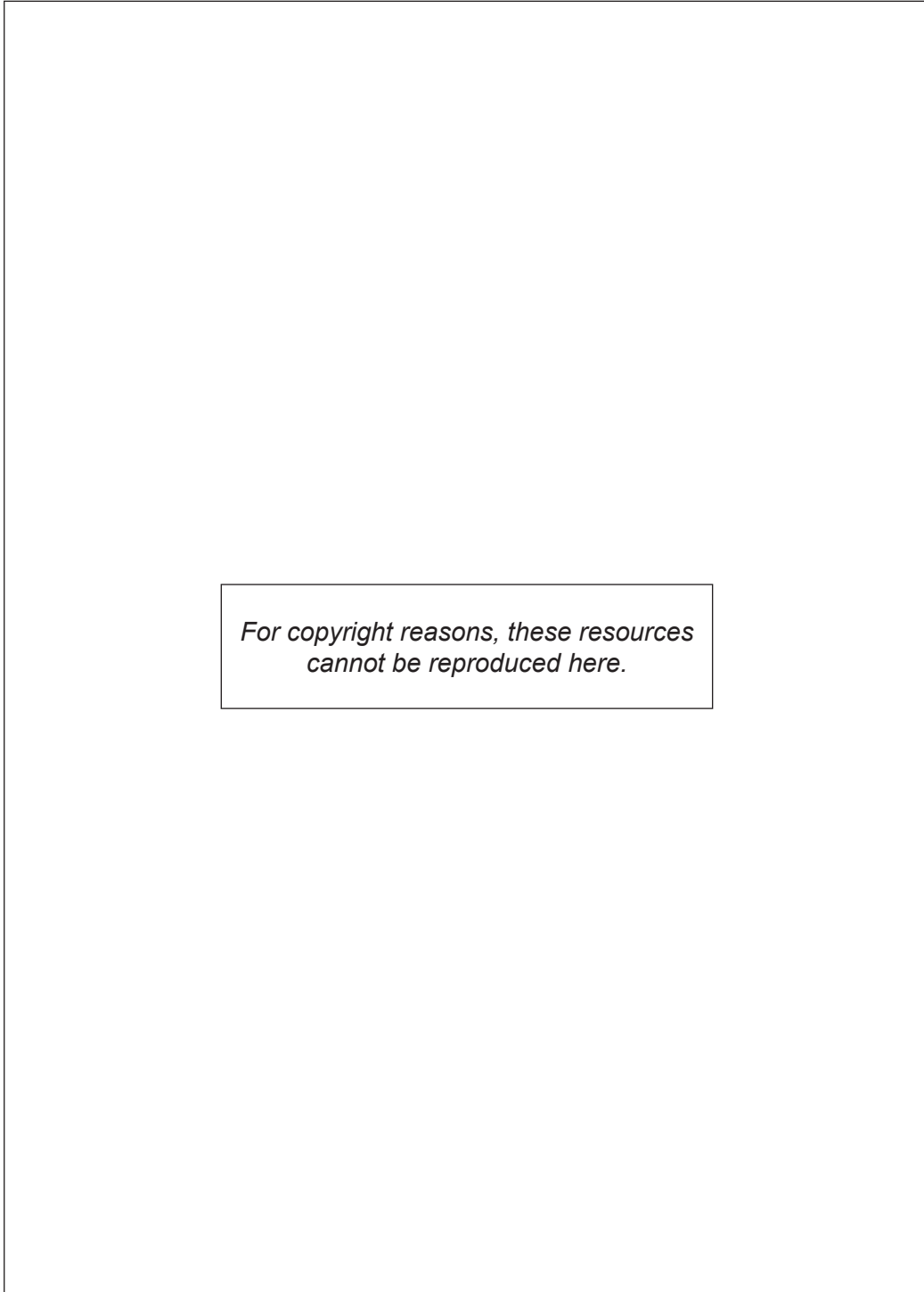
9.30 am Thursday 21 November 2013
Credits: Four

RESOURCE BOOKLET

Refer to this booklet to answer the questions for Geography 91243.

Check that this booklet has pages 2–12 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.

Resource A: Map of the United Kingdom**Resource B: London – A World City**

London is the capital city of the United Kingdom and home to over 8.2 million people. ...

Amongst worldwide major cities, London trails only New York, Tokyo, Los Angeles, and Chicago, in GDP per capita.

Resource C: Heathrow Airport–London’s Global Hub

Currently, London has six airports with seven runways in total. ...



Figure 1: London’s airports

However, its two runways are being used at around 99 % of their capacity, and as air travel keeps growing, Heathrow is in danger of losing business to Frankfurt, Paris, and Amsterdam Airports.

Resource D: Comparison of Four Major European Hub Airports (2010)

Airports	Passenger numbers (mppa)*	Runways	Destinations served	Current Air Traffic Movements (ATMs)	Runway capacity (ATMs)	Runway utilisation
Heathrow, London, UK						
Frankfurt, Germany						
Charles de Gaulle, Paris, France						
Amsterdam, The Netherlands						

*mppa=millions of passengers per annum

Resource E: The Future of London's Airports

There is a critical shortage of suitable space to construct new runways, or a new airport, in the south-east of England. One area, the Thames Estuary, has been considered as an option in a variety of plans for over 40 years.

Proposed solutions include building:

- a third runway at the present Heathrow Airport location in west London
- the “Foster’s Estuary Airport” as part of the proposed Thames Hub on the Isle of Grain, at the mouth of the Thames River (named after its architect Lord Foster); it is indicated as **option 2** on Figure 2 below.

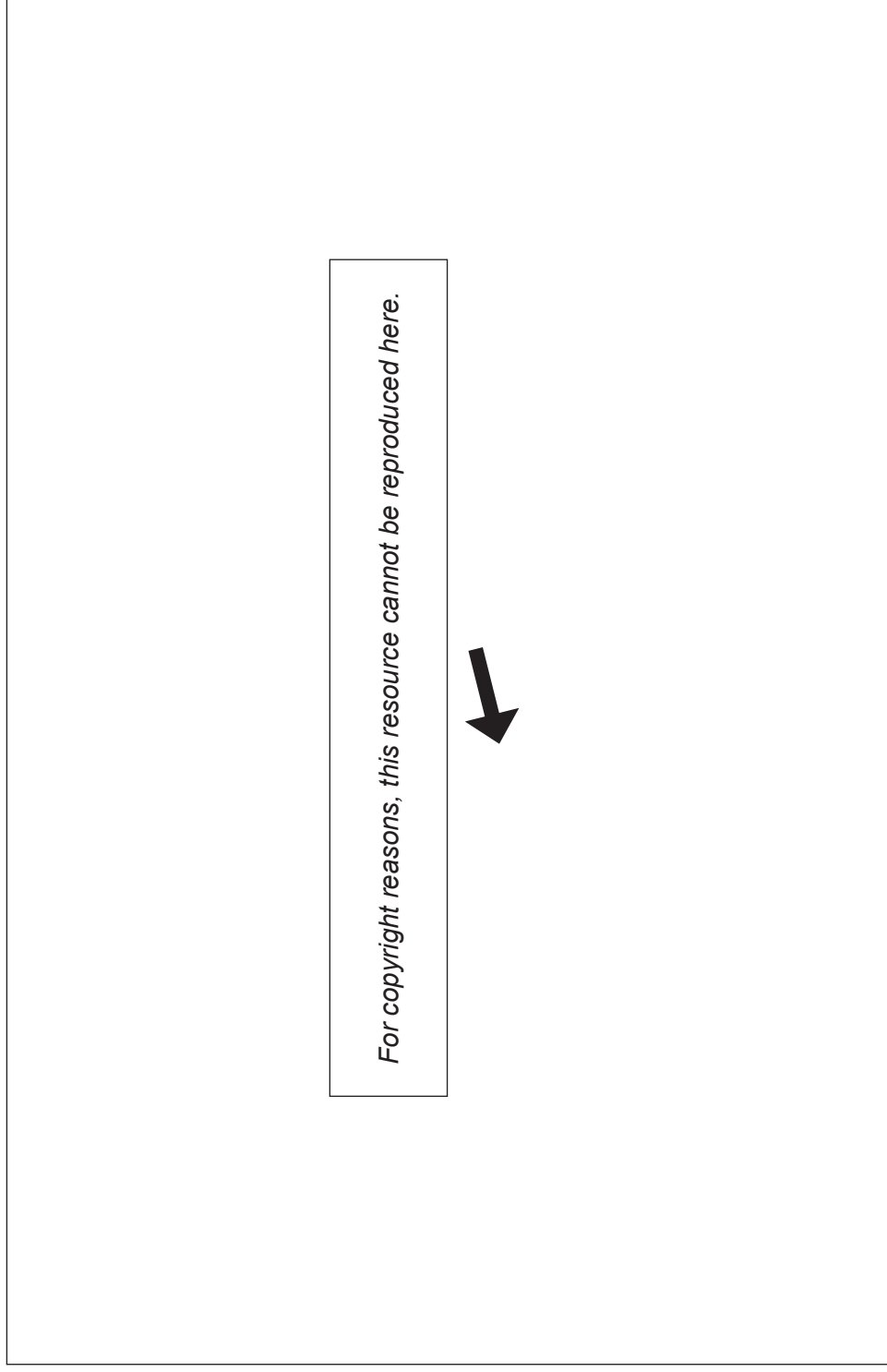
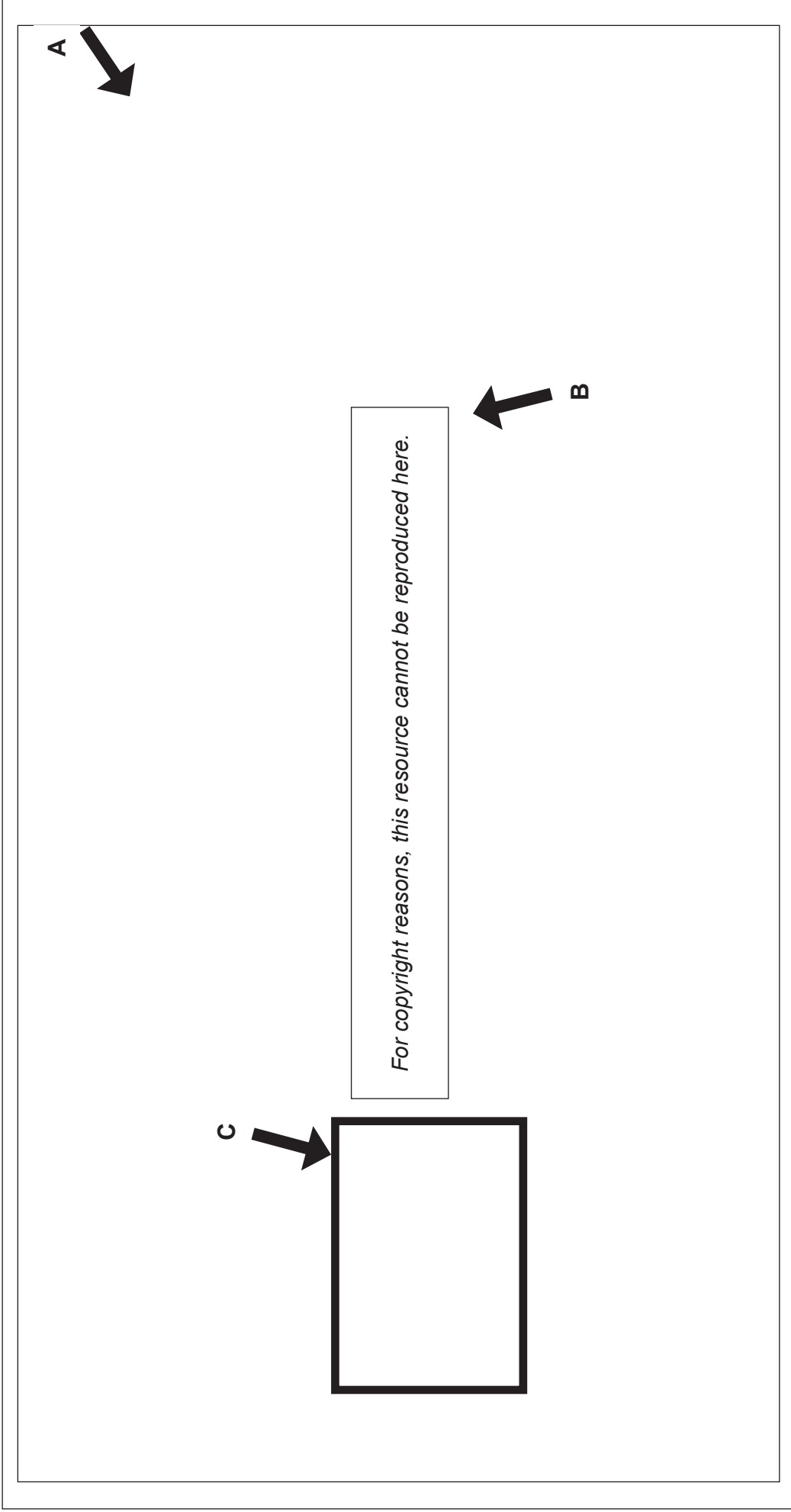


Figure 2: Possible airport development in south-east England, east of London

Resource F: Satellite Image of South-East England



Resource G: Topographical Map of Thames Estuary

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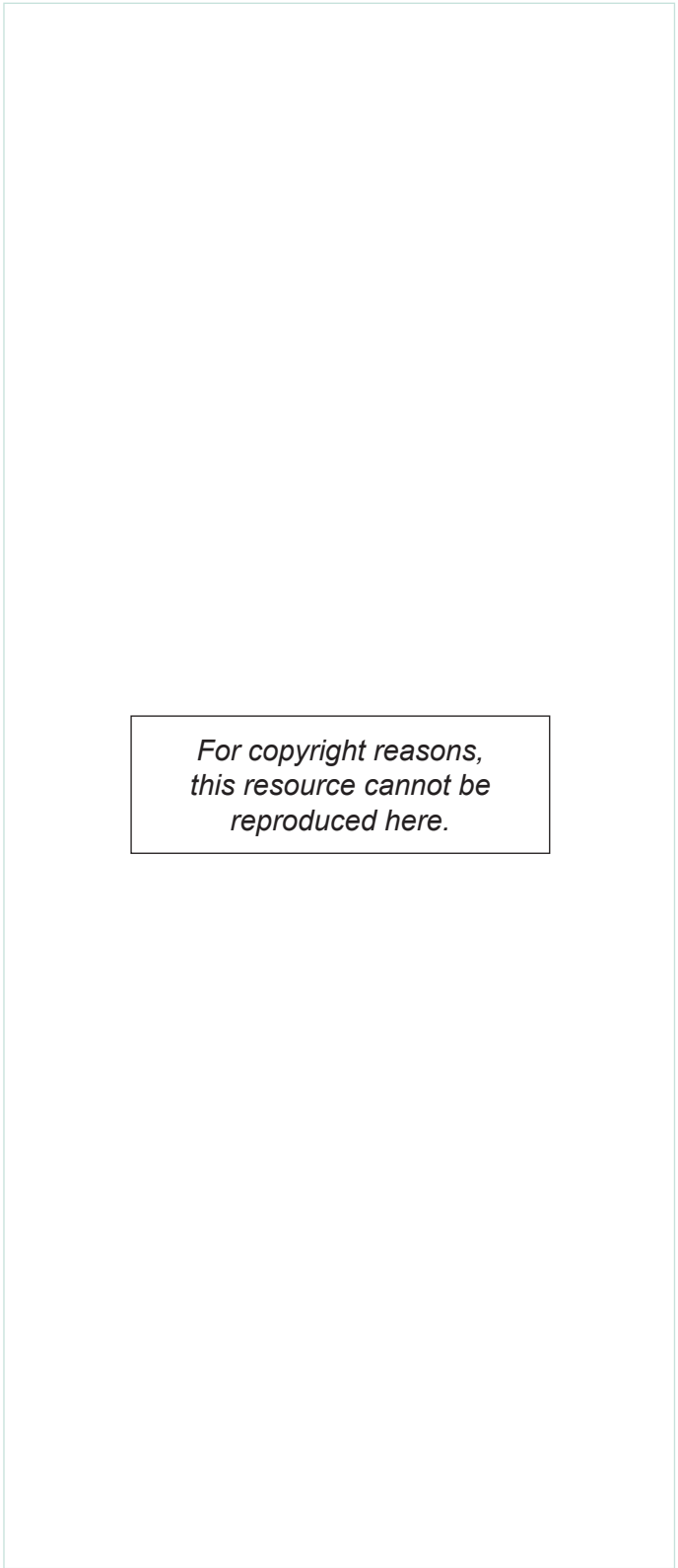
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Resource G (cont'd): Topographical Map Key

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Key



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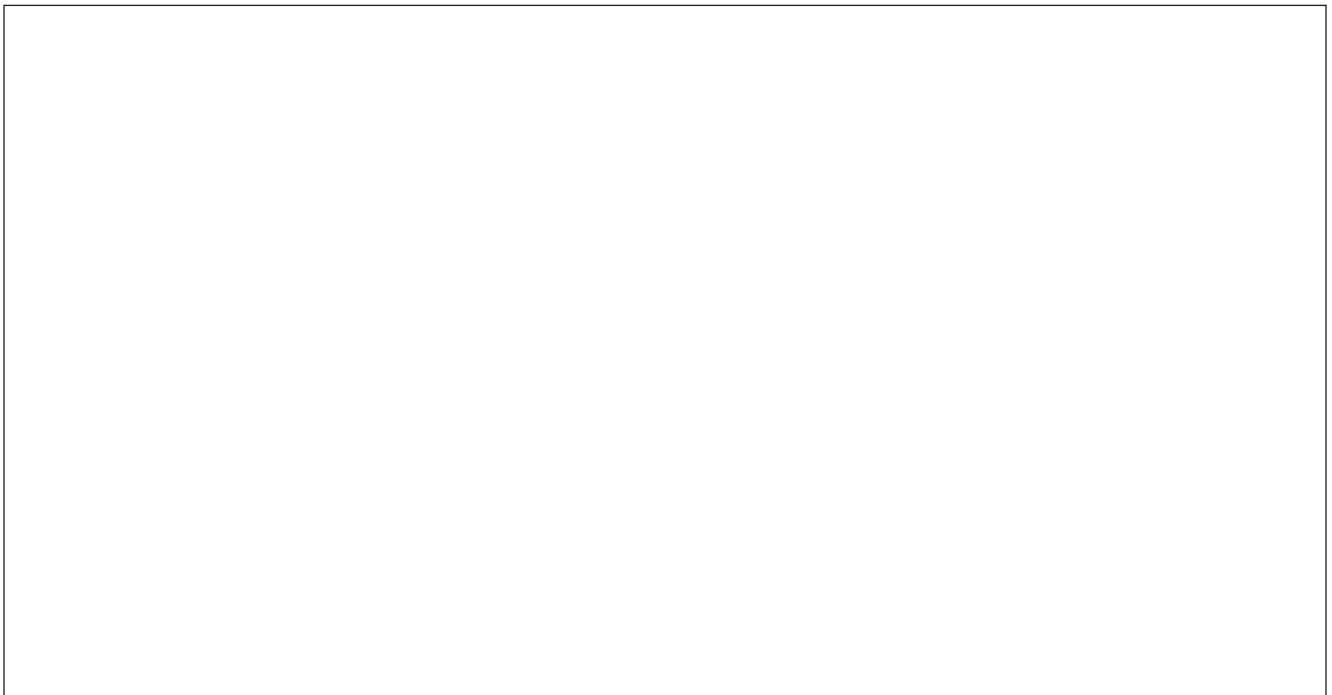
Resource H: Projected Changes to Weekly Departures from Heathrow Airport (2011–2030)



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Note: The data is based on forecast world regional population growth, and if runway capacity was unlimited.

Resource I: Global Distribution of Weekly Flights from Heathrow Airport (June 2011)



Resource J: Building a Third Runway on the Current Heathrow Airport Site

While the current British Government has rejected the proposal to build a third runway on the current Heathrow Airport site, there are many people, including Sir Richard Branson, who have been calling on the government to consider this option. ...

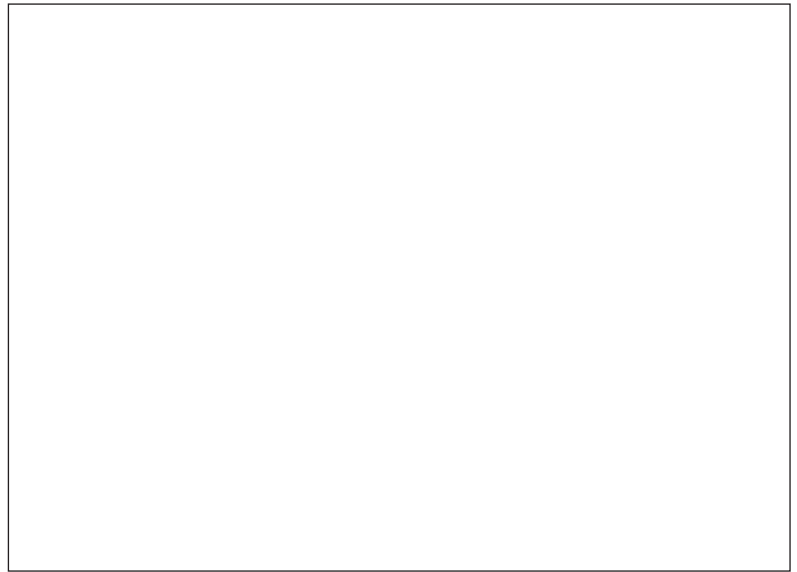


Figure 3: Heathrow expansion

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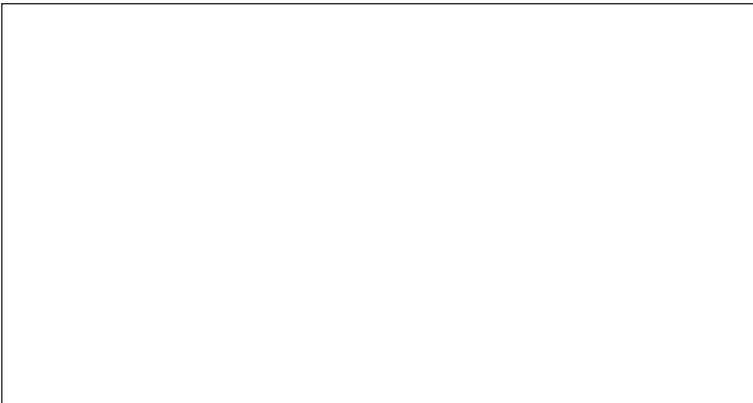


Figure 4: Airbus flying over houses near Heathrow

It is expected it would cost at least £13 billion.

Resource K: The Royal Society for the Protection of Birds (RSPB) Against Estuary Development

The Thames Estuary is a large coastal wetland that is home to many species of birds, and is a vital migration hub for hundreds of thousands of wildfowl and wading birds. ...



Figure 5: Flocking Dunlins in the Thames Estuary

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There may also be impacts on the important fish spawning and nursery grounds in the estuary, as well as subsequent effects on established fishing operations.



Figure 6: Royal Society for the Protection of Birds poster

Resource L: The Thames Hub and “Foster’s Estuary Airport”

Lord Foster of *Foster and Partners* has proposed the Thames Hub as a bold new approach to future infrastructure development in Britain. The main components of the Thames Hub would be:

- a new Thames barrier that extends the land area protected by the existing barrier by 150 % (the barrier would harness tidal power to generate carbon-free electricity) ...

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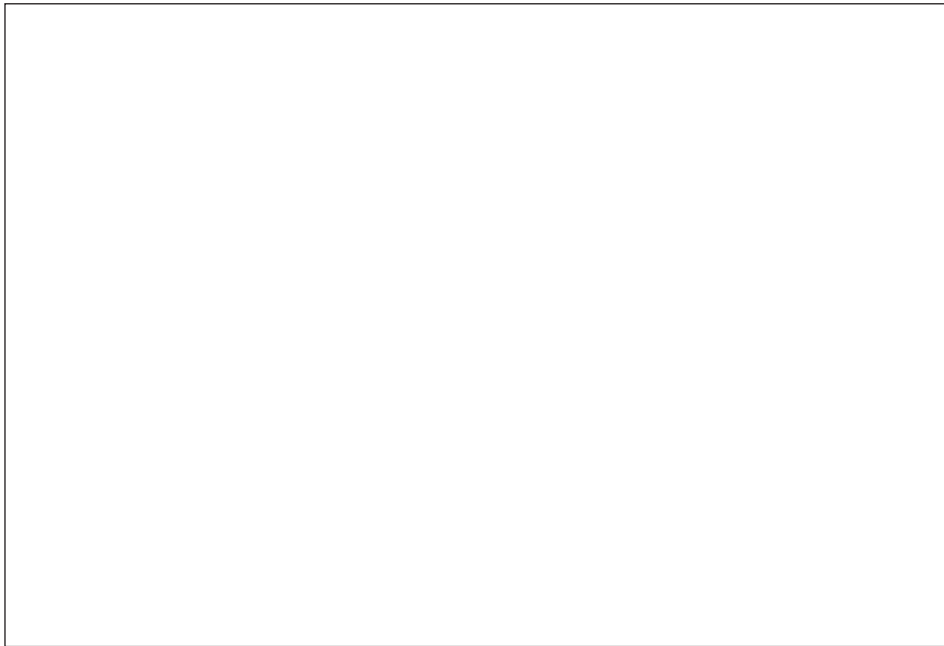


Figure 7: Proposed Thames Hub airport and ground access

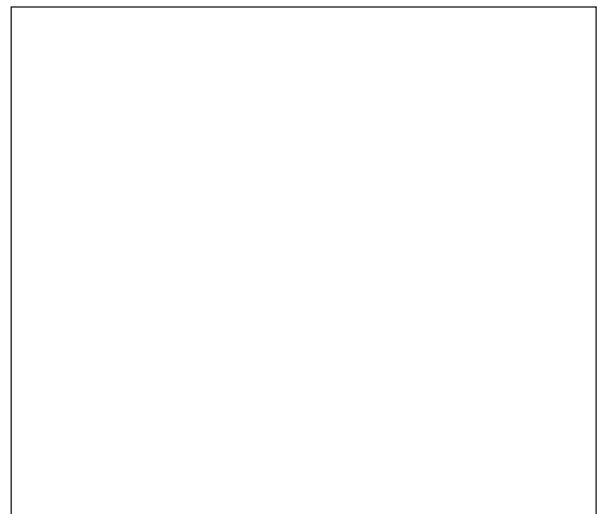


Figure 8: London Orbital

The total cost is put at £50 billion, with benefits to the economy estimated at £150 billion.

ACKNOWLEDGEMENTS

Material from the following sources has been accessed and adapted for use in this examination.

Page(s)	Source
2	Resource A: http://www.mapsofworld.com/lat_long/united-kingdom-lat-long.html Resource B: Greater London Authority, <i>A New Airport for London: Part 1 – The Case for New Capacity</i> (January 2011), http://www.london.gov.uk/sites/default/files/AnewairportforLondon_part1.pdf , p 49.
3	Resource C: Text: http://news.bbc.co.uk/2/hi/uk_news/7196158.stm Figure 1: http://ringley.co.uk/images/london_airports.jpg Resource D: Greater London Authority, <i>A New Airport for London: Part 1 – The Case for New Capacity</i> (January 2011), http://www.london.gov.uk/sites/default/files/AnewairportforLondon_part1.pdf , p 49.
4	Resource E: Figure 2: http://blog.muradqureshi.com/wp-content/uploads/2012/03/Thames_Estuary_airports_proposed_locations1.gif
5	Resource F: Google Earth
6 and 7	Resource G: Thames Estuary: Rochester & Southend-on-sea, Ordnance Survey Landranger Map 1:50 000, Southampton, United Kingdom.
8	Resource H: Greater London Authority, <i>A New Airport for London: Part 2 – The Economic Benefits of a New Hub Airport</i> (November 2011), http://www.london.gov.uk/sites/default/files/Anewairportforlondon_part2.pdf , p 88. Resource I: Greater London Authority, <i>A New Airport for London: Part 2 – The Economic Benefits of a New Hub Airport</i> (November 2011), http://www.london.gov.uk/sites/default/files/Anewairportforlondon_part2.pdf , p 69.
9	Resource J: Text: http://news.bbc.co.uk/2/hi/6177543.stm article, http://en.wikipedia.org/wiki/Expansion_of_London_Heathrow_Airport , http://www.bbc.co.uk/news/uk-england-17406374 Figure 3: http://newsimg.bbc.co.uk/media/images/45194000/gif/_45194126_heathrow_exp_466map.gif Figure 4: http://www.montrealgazette.com/business/Etihad+orders+more+Airbus+A330s/7469451/story.html
10	Resource K: Text: http://www.rspb.org.uk/ourwork/casework/details.aspx?id=tcm:9-304003 Figure 5: Image by Paul Rogers for Philip Pank, 'Birds may keep estuary airport grounded', <i>The Times</i> , found on http://www.thetimes.co.uk/tto/business/industries/transport/article3246683.ece Figure 6: http://www.rspb.org.uk/Images/TE_poster_tcm9-314320.pdf
11	Resource L: Text and Figures 7 and 8: Foster + Partners, Halcrow Group Limited, and Volterra, <i>Thames Hub – An Integrated Vision for Britain</i> , http://www.fosterandpartners.com/ThamesHub/PDF/Thames_Hub_vision.pdf , pp 5 and 19.