# **HS2-HS1 CONNECTION Brief for Demand Analysis**

#### **BACKGROUND**

- 1. Greengauge 21 is planning to conduct a research study into the potential use of the HS2-HS1 link currently proposed by Government to be constructed in Phase 1 of the HS2 project. The work will address the following specific questions:
  - a. What is the broad level of domestic travel demand between Stratford/ Ebbsfleet/ Ashford and Old Oak Common/ Birmingham/ Manchester/ Sheffield/ Leeds/ Newcastle/ Liverpool? This will be addressed by consideration of the wider demand potential between Kent/East London & Docklands/East Anglia and West Midlands/North West/ Yorkshire/ North East and Scotland etc
  - b. What is the passenger demand for a direct international services between locations such as Leeds and Manchester/Birmingham/Old Oak/Stratford (and Lille/Paris)?
  - c. What is the range of services that might be provided via the HS2 HS1 link?
  - d. How might the services be provided cost-effectively and in a way that addresses international security/border control issues?
- 2. Specialist input on transport demand analysis is required for the project, which is the subject of this brief. Additional expertise is being commissioned separately on border security issues and the final report will be developed and published by Greengauge 21.
- 3. Sponsorship for the work is currently being sought from a number of public sector organisations and sufficient interest has been expressed that Greengauge 21 is confident the work will proceed.

#### **SCOPE OF DEMAND ANALYSIS**

- 4. There are three types of passenger service that could operate over a HS2 HS1 link:
  - (a) Direct international services between the Midlands/North and Europe
  - (b) Domestic inter-regional services
  - (c) Services which provide a combination of the two service types.
- 5. Service type (a) is unlikely to support more than a low daily frequency. It needs to be considered as a possible addition to others service types. Service type (c) has to provide for secure border control/security, on which subject a separate parallel preliminary investigation is in hand. Service type (b) appears not to have been considered by HS2 Ltd to date, and the main focus of the work is to make a preliminary assessment of the scale of the travel markets that could be addressed under this heading.

## **Domestic inter-regional travel markets**

- 6. With a robust HS2 HS1 link in place, from 2026 there would be scope to operate regular hourly or better services such as Ashford Ebbsfleet Stratford Old Oak Common Birmingham Interchange Crewe/Manchester Airport/Piccadilly (with the service north of Birmingham Interchange getting a speed up under HS2 Phase 2 plans).
- 7. This would serve the following travel markets:
  - a. Kent W Midlands/North West England
  - b. Essex/Suffolk W Midlands/North West England
  - c. East London/Docklands W Midlands/North West England

- d. Kent/Essex & Suffolk/East London/Docklands Thames Valley/Heathrow/West of England/South Wales (via Old Oak Common interchange)
- e. Europe (Paris/Brussels/Lille and in future, Frankfurt/ Koln/ Amsterdam/ Rotterdam/ Antwerp) Midlands/North West (via interchange on HS1, say at Ebbsfleet).
- 8. If additional connectivity is provided at Old Oak Common as proposed by TfL (and Network Rail), then these flows can be added:
  - f. Kent/Essex & Suffolk/East London/Docklands NW London/Milton Keynes.
- 9. If the Heathrow connections are provided post-Davies Commission in HS2 Phase 2, then there is also scope for:
  - g. Kent/Essex & Suffolk/East London/Docklands Heathrow services.
- 10. And when Phase 2 HS2 is complete, services could also operate:
  - h. Kent/Essex & Suffolk/East London/Docklands East Midlands/Yorkshire
- 11. Greengauge 21's requirement is to identify the scale of each of the travel markets identified in paragraphs 7-10 above. The flows concerned are primarily domestic for which an analysis at county and region level is needed, together with an assessment of the 'East London' and NW London travel markets. If consultants are able to provide a more disaggregated analysis that relates more closely to an assessment of station catchments, it should be proposed as an addition.
- 12. For each relevant market (flow), we want an assessment of:
  - i) The total travel market (in mppa) in a suitable base year (such as 2011), a main travel mode breakdown (for which car/rail/other will suffice) and
  - ii) The same for 2026 and 2033.
- 13. For comparative purposes, we would like a similar breakdown for the total and modal markets for travel between Greater London and each of West Midlands, East Midlands, North West, and Yorkshire/Humber. If it is possible to provide the same for a suitable definition of 'central London' then that may be proposed as an additional deliverable.

## **International markets**

- 14. The scope above includes an international travel market at §7 (market e) above. This can be assessed as an air travel market (i.e. ignoring other travel modes such as rail, coach and car) for 2011 and 2026 using the latest DfT/CAA projections and evidence.
- 15. A typical through HSR service in the international sector might operate Manchester/ Birmingham Interchange/Stratford – Lille/Paris. The economics of such a service depend on a set of flows only some of which have been considered in HS2 Ltd's assessments to date. On the basis of existing practices, the flows to be considered would be not only those listed above at §7, but also:
  - a. Stratford Lille/Paris/Brussels/Antwerp/Rotterdam/Amsterdam/Koln/Frankfurt
  - b. Paris (or Amsterdam or Frankfurt) together with intermediate European locations as noted above and Heathrow
- 16. Greengauge 21 requires estimates of these international markets, based on air flows, for 2011, 2026 and 2033. If consultants are able to provide data/evidence on these markets by other travel modes, they may be offered as an addition.

#### **Advice**

- 17. Greengauge 21 would welcome commentary from consultants on the following areas, based on the data and projections as described above:
  - The relative scale of the markets that could be served by HS2 HS1 rail services in comparison with the services planned to operate between various Midland and Northern destinations and central London
  - Views based on relevant experience on the likely market share that a HSR service in these
    markets could attract assuming 2 tph (domestic services) and an appropriate frequency for
    international services, together with any assessment about induced/generated levels of
    demand that might be expected.

## **REQUIREMENTS**

- 18. Greengauge 21 expects to commission this work in early April 2013. A draft report is required within four weeks of commissioning the work, with a final report being produced within 1 week of comments being provided by Greengauge 21. If valuable intermediate outputs can be produced earlier than these timescales, that would be welcomed.
- 19. The report should contain demand analyses as set out in the Scope of Work above, supplemented with spreadsheet data and analyses where appropriate.
- 20. Consultants should note that Greengauge 21 does not have access to rail or travel demand data, so any specific requirements should be noted in the proposal together with the cost implications.

#### **TENDERS**

- 21. Proposals should set out:
  - A description of the proposed approach and programme;
  - Details of staffing proposals;
  - A fixed fee proposal, showing details of fee rates and expenses;
  - An explanation of directly relevant experience that the consultant would bring to the project.
- 22. Proposals should be set out on no more than 6 pages, excluding CVs and company experience which may be included in appendices. Proposals should be emailed no later than 12 noon, Thursday 28<sup>th</sup> March to co-ordinator@greengauge21.net.
- 23. Proposals will be evaluated according to the following criteria:
  - Value for money
  - Proposed approach and ability to meet the technical requirements of the brief
  - Specialist knowledge and competency.
- 24. Greengauge 21 reserves the right not to proceed with any appointment.
- 25. Queries should be emailed to: <a href="mailto:co-ordinator@greengauge21.net">co-ordinator@greengauge21.net</a>.

Greengauge 21 March 2013