

## PRINCIPLES FOR UK HIGH SPEED LINE DEVELOPMENT

A UK high speed line (HSL) system should be designed to the following guiding principles:

- 1. Network**

Does the HSL system form a logical incremental step in the formation of a genuine (ie not just London-centric) UK high speed line network linking city centres, improving connectivity between all principal UK conurbations and thus maximising economic and regeneration benefits?
- 2. Inclusive Routeing**

Can the network be delivered in an even-handed manner, without favouring communities to west and east sides of the Pennines - and thus ensure broad regional support essential for political acceptance?
- 3. Economic Routeing**

Can the maximum network benefits be gained for the minimum length of new construction (with 'grey' energy emissions minimised)?
- 4. Carbon Footprint / Sustainability**

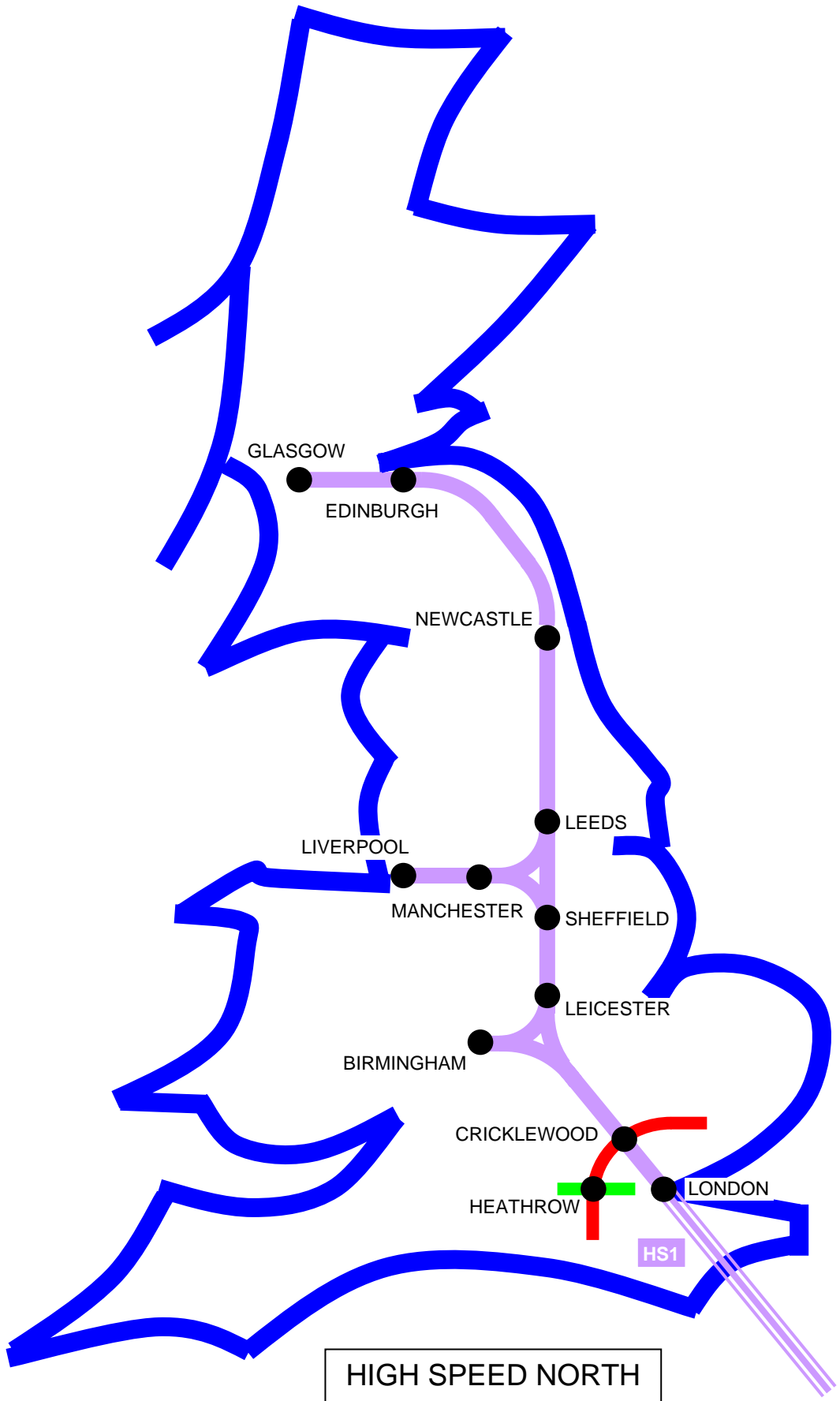
A mega-project such as a HSL network must be developed to modern carbon-critical design principles, ie not increasing emissions from the transport sector, or accelerating depletion of global fossil fuel reserves. For high speed rail, this is only achievable by eliminating most UK internal aviation, and not simply on routes to/from London. Does the proposed strategy deliver this?
- 5. Environmental Impact**

Can the network be delivered with minimised environmental impact and demolition of property, by following existing transportation corridors? This is essential for keeping the environmental lobby onside, and also minimising NIMBY objections and consequent costs.
- 6. Enhancement to Existing UK Rail Network**

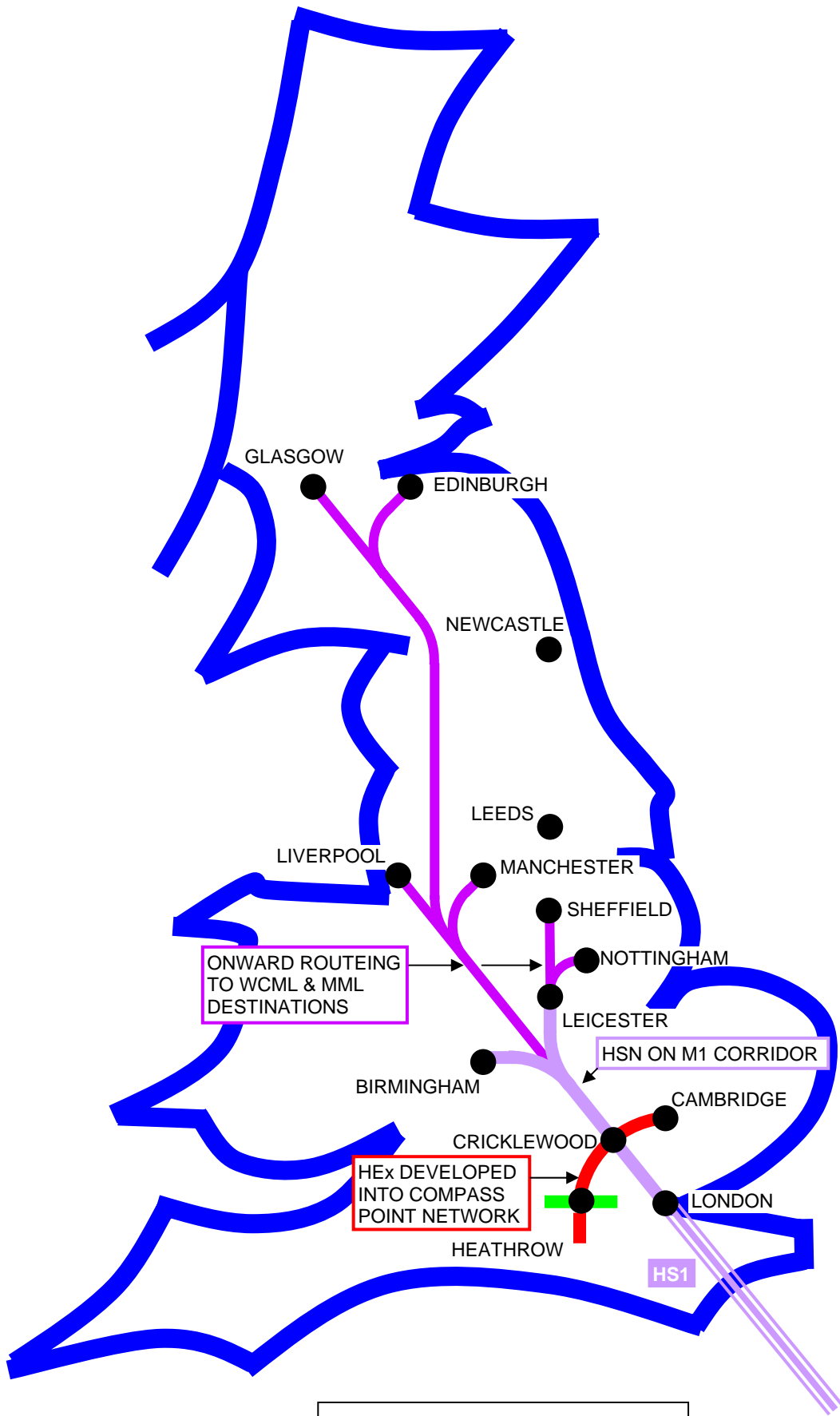
Does the HSL system offer capacity relief to the existing network, on a maximum number of main line axes? (This is a key aspiration of the Network Rail's New Lines Programme, and it will also maximise environmental gains through increased capacity for freight and local passengers).
- 7. London Terminal Strategy**

Is a practical site for a London terminal identified, with a strategy for dispersal of incoming passengers onto the wider Tube/suburban rail network, and for future-proofing against anticipated increases in passenger numbers? (This is a key recommendation of the 2003 SRA High Speed Line Study).
- 8. Compatibility with Heathrow developments**

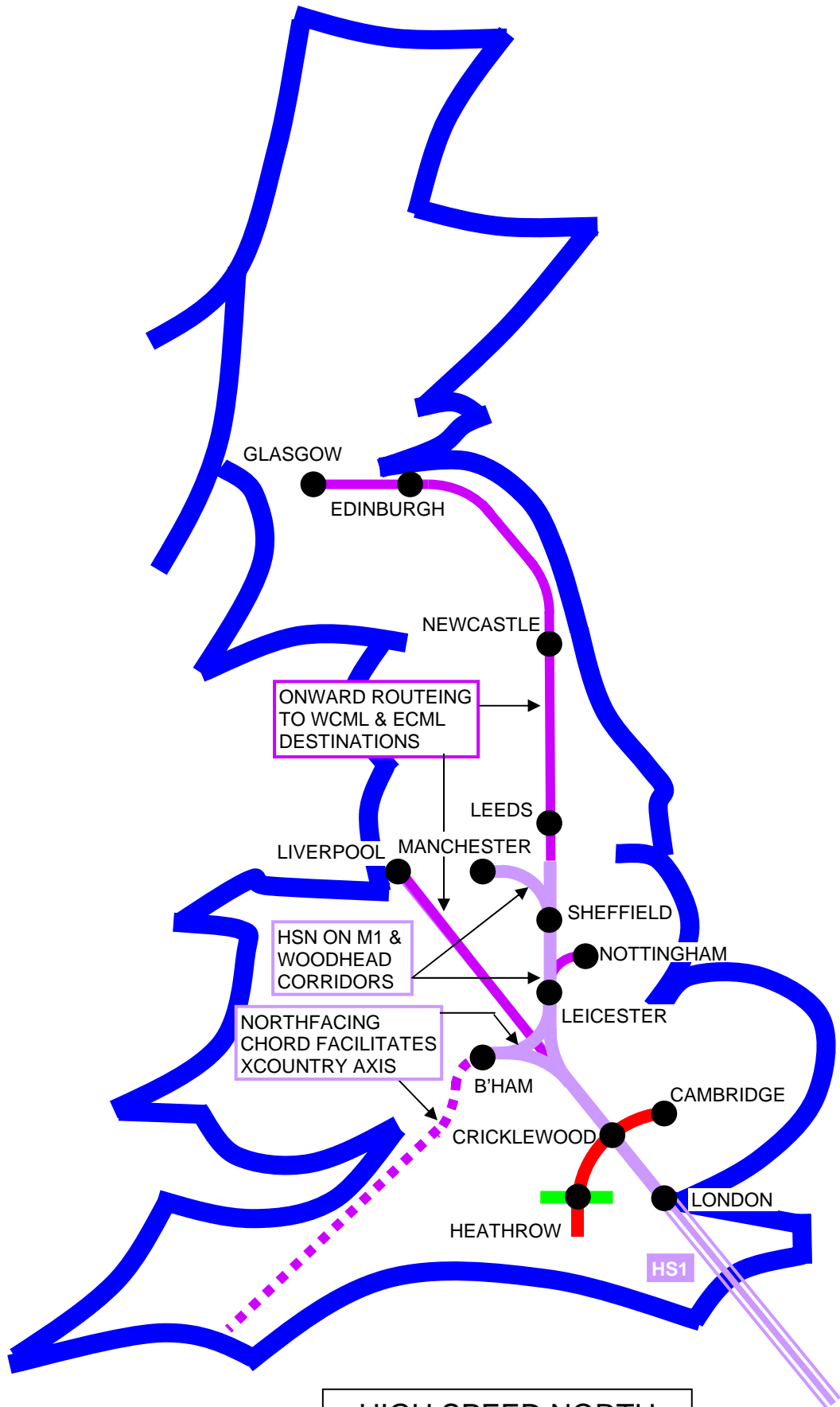
Does the HSL system harmonise with necessary improvements to Heathrow rail access from the wider UK to a) eliminate requirement for internal connecting flights, b) reduce local congestion, c) achieve wider spread of economic benefits of proximity to Heathrow? (This requirement for improved surface access aligns with both the Eddington Study and the SRA High Speed Line Study).



HIGH SPEED NORTH  
CORE NETWORK WITH  
HEATHROW LINK

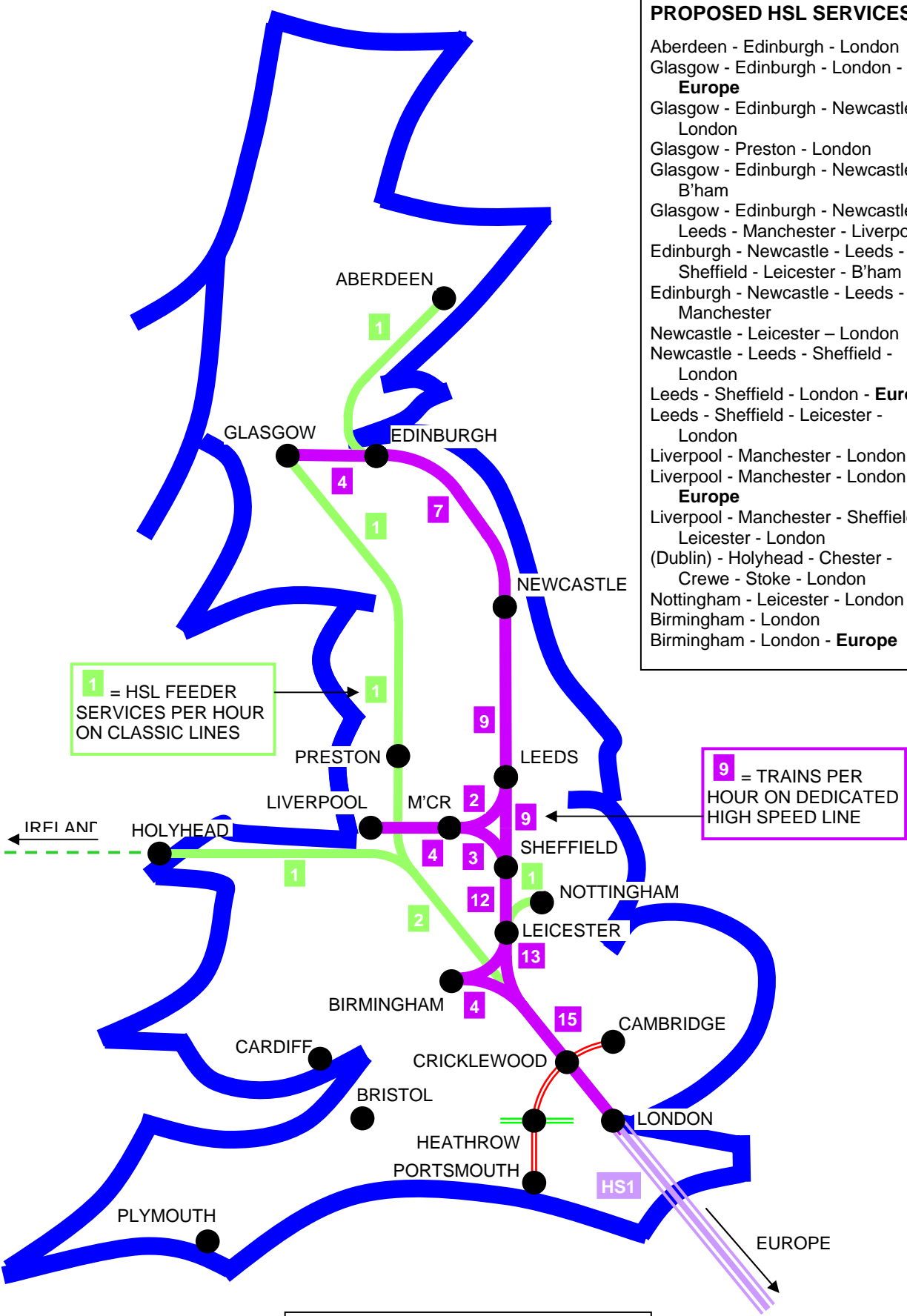


HIGH SPEED NORTH  
INITIAL PHASE  
NETWORK DEVELOPMENT



HIGH SPEED NORTH  
SECOND PHASE  
NETWORK DEVELOPMENT

- PROPOSED HSL SERVICES**
- Aberdeen - Edinburgh - London
  - Glasgow - Edinburgh - London - **Europe**
  - Glasgow - Edinburgh - Newcastle - London
  - Glasgow - Preston - London
  - Glasgow - Edinburgh - Newcastle - B'ham
  - Glasgow - Edinburgh - Newcastle - Leeds - Manchester - Liverpool
  - Edinburgh - Newcastle - Leeds - Sheffield - Leicester - B'ham
  - Edinburgh - Newcastle - Leeds - Manchester
  - Newcastle - Leicester - London
  - Newcastle - Leeds - Sheffield - London
  - Leeds - Sheffield - London - **Europe**
  - Leeds - Sheffield - Leicester - London
  - Liverpool - Manchester - London
  - Liverpool - Manchester - London - **Europe**
  - Liverpool - Manchester - Sheffield - Leicester - London
  - (Dublin) - Holyhead - Chester - Crewe - Stoke - London
  - Nottingham - Leicester - London
  - Birmingham - London
  - Birmingham - London - **Europe**



1 = HSL FEEDER SERVICES PER HOUR ON CLASSIC LINES

9 = TRAINS PER HOUR ON DEDICATED HIGH SPEED LINE

**HIGH SPEED NORTH PROPOSED SERVICES & TRAFFIC VOLUMES**

