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for Transport

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08/09/2017

Dear John,

1. The Secretary of State for Transport issued updated guidance to the Office of Rail and Road (ORR) on 20<sup>th</sup> July 2017. This includes a request for the ORR to facilitate the introduction of HS2 services.
2. In this context, I believe it would be helpful to set out our plans for the introduction of HS2 and conventional released capacity services as they currently stand, the role they play in delivering the benefits for passengers and the economy of the Government's investment in HS2, and how the Department for Transport anticipates that they will develop in the lead up to the start of HS2 operations. This letter focuses on Phase 1 and 2A operations, but the Department anticipates that a similar process would apply for Phase 2B operations.
3. I also wanted to thank you and your team for the constructive discussions we have had so far on a range of HS2 related issues. It is vital that we are able to continue this approach so that we can deliver the benefits of HS2 in a way which is fair and efficient for all of the industry, passengers and freight shippers.

### **Background**

4. HS2 will be built in three phases. Phase 1, which is currently under construction, will run from London to Birmingham and a connection to the existing rail network at Handsacre. Phase 2A will extend the high speed line north to a connection to the existing network at Crewe. Phase 2B will extend the western leg to Manchester, with a connection to the existing network at Golborne. The eastern leg will run to Leeds, with connections to the existing network at Clay Cross, Clayton and Church Fenton.
5. At all phases of operations, there will be a combination of train services which solely use the high speed network, and those which use both the high speed network and the existing rail network.
6. Transferring some services from the existing network to HS2 infrastructure creates the opportunity to make new and different uses of the existing infrastructure. This is

one of the key benefits of HS2, and making best use of the released capacity is fundamental to delivering the benefits set out in the HS2 business case. The Government's decision to invest in HS2 relies upon having confidence in these benefits being delivered.

7. Anticipated service changes in 2026 will require significant timetable changes both to integrate new HS2 services into the existing network, and to begin to change the way capacity is used on the southern West Coast Main Line (WCML). This will also be the case in 2027 and 2033 when Phases 2A and 2B open.
8. The High Speed Rail (London – West Midlands) Act 2017 grants powers to construct Phase 1, but does not set the rail services which will be operated when HS2 opens. The High Speed Rail (West Midlands-Crewe) Bill is similarly drafted.

### **Process**

9. The 2013 Economic Case for HS2, which supported the High Speed Rail (London-West Midlands) Bill on its introduction to Parliament, assumes a passenger train service for both the high speed and existing networks. This train service includes high speed services, conventional services using the capacity released by HS2 on the existing network, and other conventional services interacting with either of these, and potentially changing as a result. This is to model the benefits of HS2, and to inform development of it.
10. These assumptions therefore represent the current best judgement of the conventional and high speed services which will operate when HS2 opens. However, they have not been developed to the level of a timetabled train service.
11. It is neither feasible nor desirable to determine the operational timetable too early. Service planning and timetabling should take account of the most up to date information on demand, rolling stock performance and network capability, so it is desirable to maintain flexibility at this stage.
12. The Department intends the service development process to enable the delivery of an integrated, well designed rail service optimised for the network as a whole. Work to develop the operational timetable will be led by Network Rail, as the national system operator.
13. The Department is currently developing a new franchise, the West Coast Partnership, which will combine existing Intercity West Coast and HS2 Phase 1 and 2A operations. The West Coast Partnership franchisee, and other passenger and freight operators, will be responsible for working with Network Rail to design the train service to operate on the WCML when HS2 opens, using their expertise and experience, alongside the most up to date information on demand, rolling stock performance and network capability. This process will include a public consultation on the options for train services.
14. Accordingly, the eventual train service which operates may vary from the Economic Case train service used to model the benefits of HS2. Nevertheless, long term demand patterns, the Secretary of State's objectives for the railway, the need for a smooth and orderly transition from current operations, through Phase 1 and 2A to Phase 2B operations, and constraints arising from the design of the new and existing rail infrastructure mean that many of the features of the Business Case

train service are likely to be shared by the eventual operating train service. Thus existing published information concerning post-HS2 train services helps to inform likely requirements for track access on the national network when HS2 opens. This information, and key developments to the Phase 1 and 2A train service assumptions, are set out below.

## **Assumptions**

### *Documentation*

15. The Government set out the following high level principles in the 2013 Strategic Case:<sup>1</sup>

- an aim that all places with a direct London service today retain a broadly comparable or better service after HS2 opens;
- to provide additional commuter capacity where it is most needed;
- to spread the benefits of long distance and inter-regional services to the many towns and cities that can be served by the capacity created on the existing rail network;
- to fully integrate HS2 services into the wider national rail network;
- to provide capacity for the growing railfreight sector; and
- to improve performance by making timetables more robust

These principles were applied in developing the Business Case train service, and the Government anticipates that they, alongside the need for a smooth transition to eventual post-HS2 Phase 2B operations, will inform design of the train service which eventually operates.

16. The 2013 HS2 Economic Case train service, which supported introduction of the High Speed Rail (London-West Midlands) Bill, is set out in the Planet Framework Model v4.3 assumptions report.<sup>2</sup>

17. The 2015 HS2 Phase 2A West Midlands-Crewe Economic Case supports the Government's decision to proceed with the West Midlands to Crewe section of railway in advance of the rest of Phase 2. The High Speed Rail (West Midlands to Crewe) Bill was introduced to Parliament in July 2017. In support of this revised plan an updated train service, making use of the additional high speed infrastructure, was devised. It is set out in the Planet Framework Model v5.2 assumptions report.<sup>3</sup>

18. The 2016 HS2 Phase 2B Economic Case is supported by train service assumptions set out in the Planet Framework Model v6.1c assumptions report<sup>4</sup>. There were no major changes to the assumed high speed or released capacity services relative to those set out in the Planet Framework Model v5.2 assumptions report.

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<sup>1</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/260525/strategic-case.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/260525/strategic-case.pdf)

<sup>2</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/365348/SA\\_20\\_PFM\\_assumptions\\_report\\_V3\\_0.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/365348/SA_20_PFM_assumptions_report_V3_0.pdf)

<sup>3</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/498234/assumptions\\_report\\_PFM\\_2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/498234/assumptions_report_PFM_2016.pdf)

<sup>4</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/574740/Planet\\_Framework\\_Model\\_Assumptions\\_Report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/574740/Planet_Framework_Model_Assumptions_Report.pdf)

19. July 2017 saw further revisions to the assumed train service. These include revisions to conventional WCML services to take account of improved information about the capability of the network and, for Phase 2B, changes to serve Sheffield city centre with direct HS2 trains. This train service is set out in the Planet Framework Model v7.1 assumptions report.<sup>5</sup> The Department also announced a consultation on proposals for a Crewe hub, setting out potential scenarios for a revised train service to serve this.
20. The majority of train service assumptions have been unchanged throughout the project. Where changes have been made it has been to reflect scheme revisions, improved information about the capability of the network, or external changes to existing train services. Further changes to train service assumptions may need to be made as plans for HS2 develop further.

### **Assumed train service patterns**

21. The case for HS2 is built on enabling better use of the whole rail network. Train service assumptions for the conventional and high speed networks are interdependent, and intended to illustrate the benefits of the best use of the rail network as an integrated whole. In developing these assumptions for Phase 1 and 2A, different considerations apply on the southern part of the WCML, where HS2 Phases 1 and subsequently 2A add parallel capacity, and on the northern part of the WCML, where no additional capacity is provided and HS2 services will use the existing network.
22. Illustrations of these assumptions for WCML corridor services at Phase 1 and 2A operations states are included at Annex 1. The full suite of assumptions is set out in the Planet Framework Model v7.1 assumptions report, as described at (19).

#### *Services on HS2*

23. Three trains per hour are anticipated to serve London to Birmingham Curzon Street, using high speed infrastructure. The remaining seven paths per hour are anticipated to be used by services starting or completing their journey on the northern WCML, travelling between London and Manchester, Glasgow, Preston or Liverpool.

#### *Services on the northern WCML*

24. On the northern part of the WCML the primary changes are the replacement of some existing intercity services with HS2 services, which largely mirror existing services at the northern end, and use HS2 infrastructure rather than the southern end of the WCML.
25. Three high speed trains per hour are assumed to serve Manchester Piccadilly. These will replace the existing three trains per hour intercity service, but it is anticipated that all will be routed via Crewe.
26. The existing hourly London to Glasgow service is assumed to be replaced by a service using HS2 infrastructure at the southern end.

27. The existing hourly London to Liverpool Lime Street service is assumed to be replaced by a service using HS2 infrastructure at the southern end.
28. Additional all-day services from London to Liverpool Lime Street and Preston are anticipated, replacing the existing peak services with two trains per hour. The Preston service would maintain existing connectivity to Warrington and Wigan.
29. There are particular capacity constraints between Crewe and Manchester Piccadilly, Crewe and Weaver Junction and north of Preston. The Department is working with HS2 Ltd and Network Rail to understand these, and their implications for future passenger and freight services.

#### *Services on the southern WCML*

30. On the southern part of the WCML the primary change is the removal of five long distance services per off-peak hour (three to Manchester, one to Liverpool and one to Glasgow), which transfer to HS2 infrastructure.
31. These are largely replaced on the southern WCML by similar conventional services designed to deliver the Government's objectives set out earlier. These services generally, but do not always, have a northern destination short of the point where HS2 trains join the existing network.
32. The current assumption is that the total quantum of passenger trains using the southern WCML in peak hours will be unchanged. In off peak hours it is currently assumed that the total quantum will be slightly reduced, potentially creating opportunities for (for example) additional passenger or freight services or breaks in the timetable to support good performance. The number of conventional platforms at Euston is assumed to be reduced to 13. However, the total number of platforms at Euston is planned to increase from today's number on completion of HS2.

#### **Access**

33. HS2 legislation has not changed the industry procedures under which track access agreements are made and regulated. The West Coast Partnership franchisee will have to conclude a track access agreement with HS2 Ltd for high speed services on the new infrastructure. It and other franchisees will have to conclude track access agreements with Network Rail for new and revised high speed and conventional services on Network Rail infrastructure.
34. The Department envisages that this will be uncontroversial for the new high speed infrastructure. For the majority of anticipated conventional train services the Department also envisages that this will also be uncontroversial, given that they are likely to represent revisions to existing train services for which the current operators hold existing access rights.
35. Some anticipated train services may require different access rights to those under which existing services operate, and track access applications by other parties have the potential to affect the delivery of a timetable recast (this is particularly the case for those prior to the industry process for developing post-HS2 service patterns, where the proposed access rights could endure beyond the start of HS2).

operations). The Department would be keen to explore with the ORR how it envisages its approach to regulating track access can help to achieve optimum use of the rail network when HS2 opens.

**Next steps**

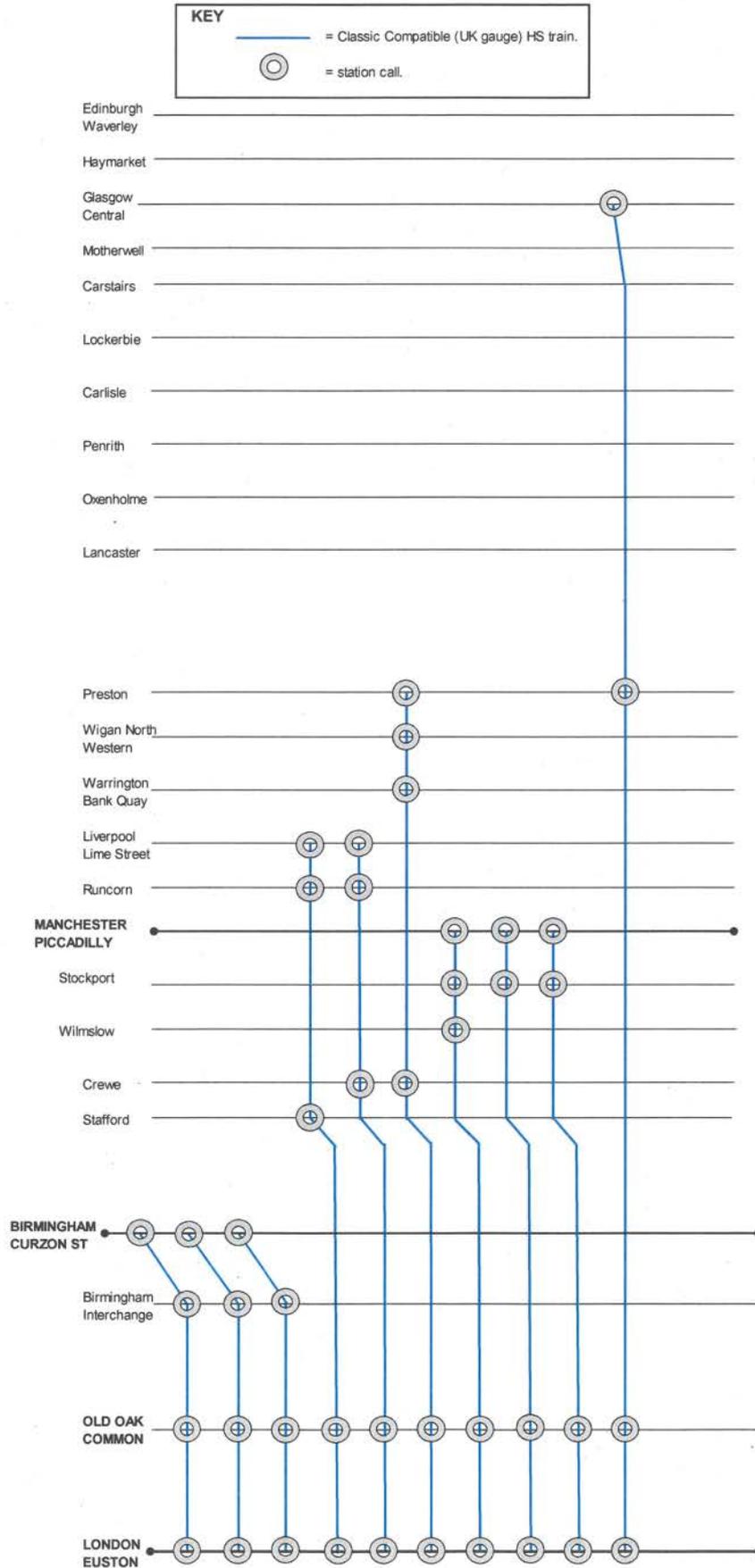
36. Noting the information in this letter, the Secretary of State's guidance to the ORR, and the ORR's existing statutory duties, I would be grateful if you could set out the approach the ORR will take to handling track access applications relevant to the introduction of HS2 operations.

*Michael Hurn*

**Michael Hurn**

# Annex 1 – Selected current indicative service patterns for the WCML and HS2 at Phase 1 and Phase 2A operations

HS2 service pattern used in PFM v7.1 – Phase 1

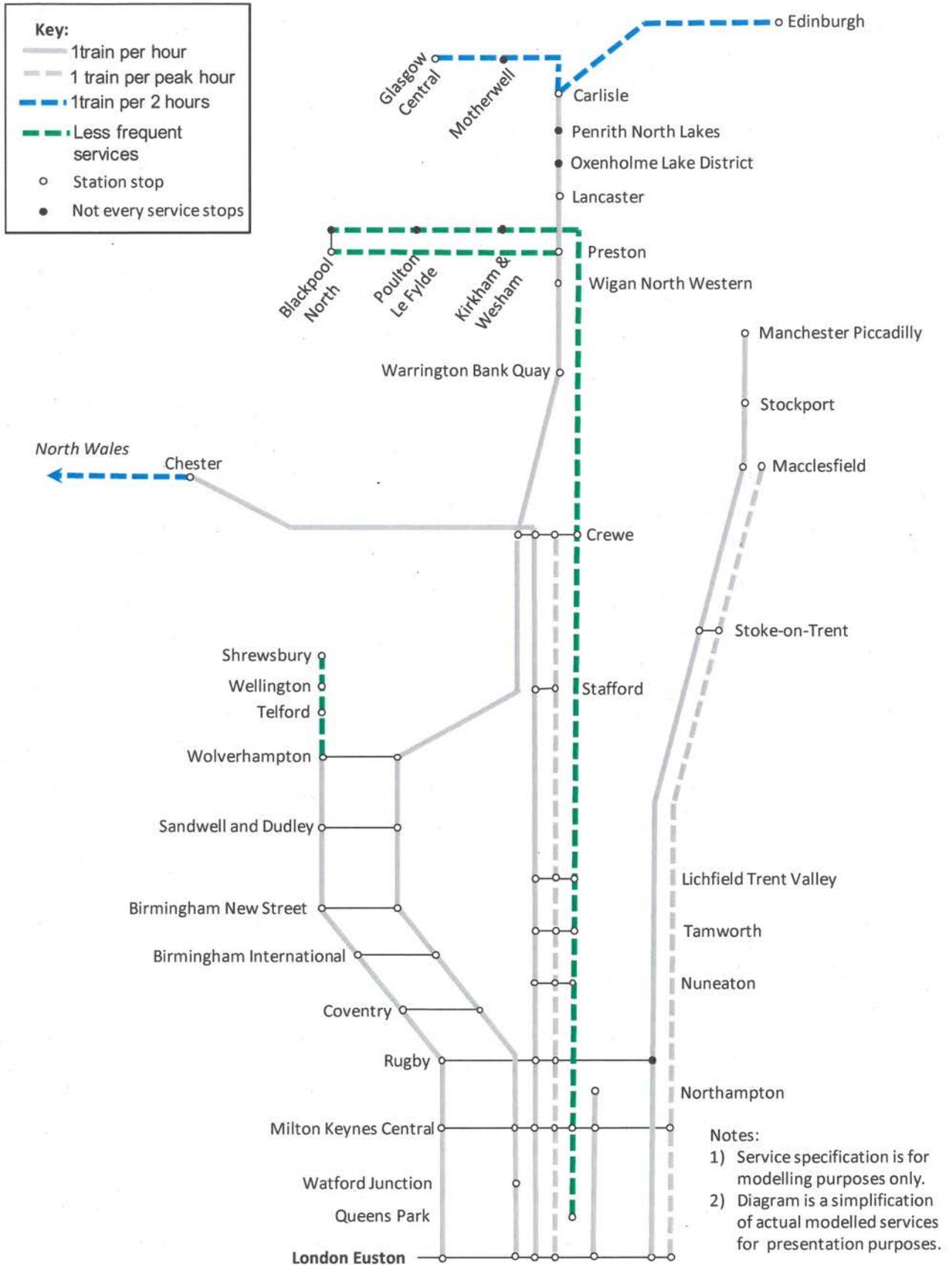




Non-HS2 train services

West Coast Main Line long distance services assumed in PFM v7.1 – Phase 1 and 2a.

This is a model which assumes HS2 services are operating on the network.



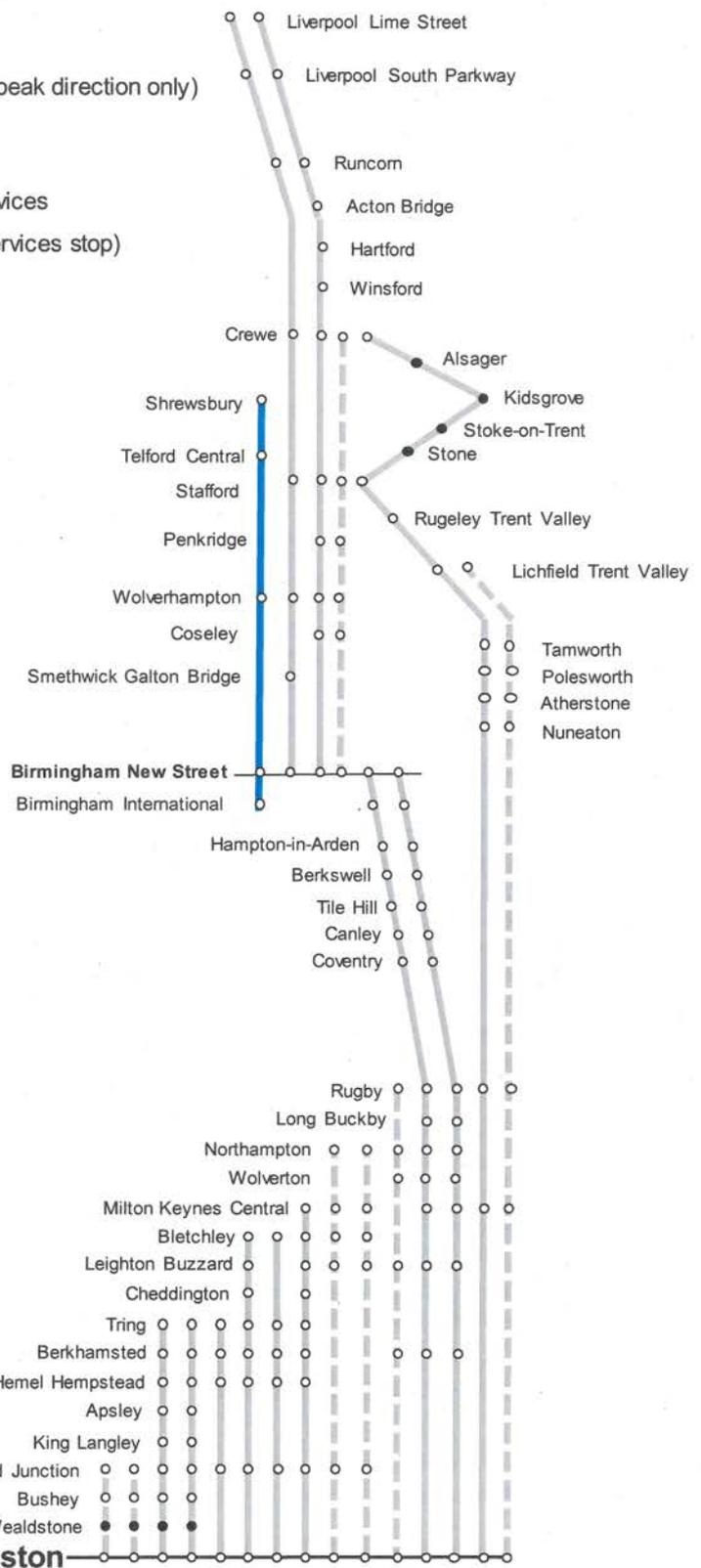
N.B. Assumptions correct as at July 2017 but subject to future change.

# West Midlands franchise WCML service pattern used in PFMv7.1– Phase 1 and Phase 2a

This is a model which assumes HS2 services are operating on the network.

**Key:**

-  1tph all day
-  1tph in peak hour(s) (peak direction only)
-  2 tph all day
-  Station stop on all services
-  Station stop (not all services stop)



**Notes:**

- 1) Service specification is for modelling purposes only.
- 2) Diagram is a simplification of actual modelled services for presentation purposes.
- 3) Low frequency services not shown on the diagram (1 or 2 tpd)

NB. Diagram does not incorporate changes in upcoming West Midlands franchise expected to be implemented in December 2018.