

Mr J Marriott

By email: [request-253279-b69fboag@whatdotheyknow.com](mailto:request-253279-b69fboag@whatdotheyknow.com)

18 March 2016

Dear Mr Marriott

**FOI16-1487**

Thank you for your information request received via email on 19 February 2016. Your request has been considered under the Environmental Information Regulations (EIR) 2004.

In your email you requested the information below:

**"My original question asked you to confirm whether HS2 had any documentation or analysis which backed up two statements made by David Higgins to Parliamentary committees that capacity increased with speed. Although the words used by David Higgins are not as clear as they could be, it is quite evident from the context of both statements that David Higgins was talking about the capacity of a single railway line in terms of trains per hour and his claim that the number of trains that it could carry would approximately double if they travelled at twice the speed.**

**In my request dated 14th December 2015 I asked for you to supply any statements or documentation that HS2 Ltd have that supports or disagrees with David Higgins' statements that capacity increases with speed.**

**In your response dated 11th January 2016 you said that the information was contained in a briefing note provided for David Higgins prior to the Transport Select Committee which claimed that "a zoomph train moves double the number of passengers a day than a 100mph train does." This is presumably based on the rather optimistic assumption that the faster train will make twice as many journeys in the same time.**

**However, the capability of a single train to carry more passengers in a day has nothing at all to do with the capacity of a single line to carry trains. Furthermore, in your answer to Q1, you state that the briefing note relates to the broader strategic context for high speed rail rather than a detailed plan for the operation of HS2. The briefing note is not therefore relevant to my questions or to David Higgins' statements. My original question therefore remains unanswered.**

**It is impossible to conceive that HS2 has not looked in some detail at the relationship between speed and the capacity of its proposed tracks to carry trains. Please provide relevant reports or documentation to show that HS2 Ltd understand the relationship between the speed of trains and the operational capacity of a single line, having regard to all the various features and characteristics along that line which could affect its capacity."**

I can confirm that we hold some information in relation to your request relating to reports or documentation related to the operating capacity of HS2. Please refer to the following documents at the online links provided:

High Speed Two (HS2) Limited One Canada Square, London E14 5AB  
T: 020 7944 4908 E: [hszenquiries@hs2.org.uk](mailto:hszenquiries@hs2.org.uk) [www.gov.uk/hs2](http://www.gov.uk/hs2)

High Speed Two (HS2) Limited, registered in England and Wales.  
Registered office: One Canada Square, London E14 5AB. Company registration number: 06791686. VAT registration number: 181 4312 30.

Summary report on the capacity and capability for the High Speed Network (October 2011):  
<http://webarchive.nationalarchives.gov.uk/20141027142236/http://assets.hs2.org.uk/sites/default/files/inserts/111020%20hs2%20summary%20tech%20spec%20capacity%201%200.pdf>.

Signalling headways and maximum operational capacity on High Speed Two London to West Midlands route (October 2011):  
<http://webarchive.nationalarchives.gov.uk/20141027142236/http://assets.hs2.org.uk/sites/default/files/inserts/hs2%20minimum%20headway%20august2011%20v3%201%20final.pdf>.

Bombardier Transportation capacity evaluation report (October 2011):  
[http://webarchive.nationalarchives.gov.uk/20141027142236/http://assets.hs2.org.uk/sites/default/files/inserts/bombardier%20transportation%20hs2%20final\\_121011.pdf](http://webarchive.nationalarchives.gov.uk/20141027142236/http://assets.hs2.org.uk/sites/default/files/inserts/bombardier%20transportation%20hs2%20final_121011.pdf).

ARUP report on achieving high capacity at stations (October 2011):  
<http://webarchive.nationalarchives.gov.uk/20141027142236/http://assets.hs2.org.uk/sites/default/files/inserts/arup%2020110808%20design%20trade%20offs%20for%20stations%20combined%20report.pdf>.

Scheme assumptions and service patterns are available in the 2013 Economic Case for HS2, please refer to Appendices 2 on pages 69-72: <https://www.gov.uk/government/publications/hs2-economic-case-october-2013>.

Capacity and the number of trains per hour on HS2, please refer to Chapter 4, section 2 in the 2013 HS2 Strategic Case: <https://www.gov.uk/government/publications/hs2-strategic-case>.

The presentation on the released capacity provided by HS2 by Professor Andrew McNaughton, HS2 Ltd's Technical Director at the Commons Select Committee for the Phase One Bill contains some information on operational capacity but not in relation to speed. The presentation was made on 11 February 2015. The transcript and slide presentation are available on the UK Parliament website as follows:

Select Committee oral evidence, pages 41-48: [http://www.parliament.uk/documents/commons-committees/hs2/oral-evidence/110215\\_Uncorrected\\_Afternoon.pdf](http://www.parliament.uk/documents/commons-committees/hs2/oral-evidence/110215_Uncorrected_Afternoon.pdf).

Select Committee evidence, pages 113-143:  
<http://www.publications.parliament.uk/pa/cmhs2/evidence/11February2015.pdf>.

If you are unhappy with the way we have handled your request or with the decisions made in relation to your request, you may complain in writing to HS2 Ltd at the above address. Please also see attached details of HS2 Ltd's complaints procedure and your right to complain to the Information Commissioner.

Please remember to quote reference number **FOI16-1487** in any future communication relating to this request.

Yours sincerely

**Jane Ivey**  
Freedom of Information Manager  
High Speed Two (HS2) Limited

### **Your right to complain to HS2 Ltd and the Information Commissioner**

You have the right to complain to HS2 Ltd within two calendar months of the date of this letter about the way in which your request for information was handled and/or about the decision not to disclose all or part of the information requested.

Your complaint will be acknowledged and you will be advised of a target date by which to expect a response. Initially your complaint will be re-considered by the official who dealt with your request for information. If, after careful consideration, that official decides that his/her decision was correct, your complaint will automatically be referred to a senior independent official who will conduct a further review. You will be advised of the outcome of your complaint and if a decision is taken to disclose information originally withheld this will be done as soon as possible.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF