Mr Andrew Stephenson MP
Minister for High Speed Rail
c/o 9 Cross Street
Nelson
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Dear Mr Stephenson,

Open Letter to Prime Minister exposing Key HS2 Design Failures/ Your Evidence to HoC Transport Select Committee 6th January 2021

Today I have written to Prime Minister Boris Johnson to alert him to critical failings in his Government's HS2 project. I am writing to you also, as the Minister responsible for HS2, with particular reference to your evidence to the Transport Select Committee on 6th January 2021.

HS2's failings go far beyond its excessive cost and its destructive environmental impact, with which you will of course be familiar. HS2's core failing is far more fundamental – its disastrous performance in developing the national rail network to deliver meaningful improvements in links between the UK's major cities, and thus meet its own objective[1] of 'hugely enhanced capacity and connectivity'.

This failure will impact upon every subsidiary railway project, either Northern Powerhouse Rail, Midlands Rail Hub or enhancements to the existing network, and it renders useless all of the Government's key railway initiatives:

- the yet-to-be-published *Integrated Rail Plan*[2];
- the *Union Connectivity Review*[3] to develop strengthened links between the UK nations;
- the *Williams-Shapps Plan for Rail*[4], recently launched as 'Great British Railways' with its ambition for 'one connected network';
- the development of a 'Net Zero' CO_2 emissions national railway network[5].

This in turn effectively sabotages every relevant aspect of Government policy including:

- 'Levelling-up' the UK economy;
- Achieving 'Net Zero' transport sector CO_2 emissions;
- Strengthening transport links between the UK nations;
- 'Building back better' after the Covid-19 pandemic.

None of this is the direct fault of Boris Johnson. All he has done is rely upon his transport advisors, who have consistently and falsely reassured him that HS2 is the right project, indeed the only project capable of delivering the core objective of 'hugely enhanced capacity and connectivity'.

The core problem is not one of political direction, but one of technical competence within the UK transport establishment. Whatever competence these Government advisors might possess in their particular fields of expertise, and however great their obsession with building the fastest railway in the world[6], they would appear to have no competence whatsoever in the design and development of an integrated and optimised national railway network.

This critical 'competence deficiency' leaves Ministers such as yourself (and indeed, all your predecessors) utterly exposed, making public statements in good faith on the basis of very bad advice. A case in point is your appearance before the 6th January session of the Transport Select Committee. at which you spoke eloquently of the projected benefits of HS2, proclaiming it in glowing terms as a '…globally beating highest speed and highest capacity network…'

This impressive statement conceals a very embarrassing fact which Government advisors have apparently lacked the competence to recognise. HS2's 'globally beating highest speed' will actually prevent HS2 from functioning as any sort of 'network'. It has dictated HS2's

destructive rural routes which cannot be successfully integrated to work in harmony with the existing railway system. So a fortunate few travelling between a select group of primary cities will enjoy the benefits of HS2's superfast journey times, while the vast majority will still be compelled to make their journeys on a slow and underfunded existing network.

This is clearly not 'levelling up', and it makes a mockery of your claims for the Integrated Rail Plan. You must surely appreciate that it is quite simply not possible to retrofit integration onto constituent schemes, in particular HS2, which were designed with no thought for integration.

What should of course have happened was for high speed rail to be specified from the outset as a system of new lines, fully connected with the existing railway system, to form a single integrated network – effectively the 'one connected network' that the *Williams-Shapps Plan for Rail* now advocates.

The benefits of this holistic approach are confirmed by the vastly superior performance of the High Speed UK Exemplar Alternative[7]. The analysis that HSUK has undertaken, and presented[8] to the Prime Minister, proves clearly that an upgraded national network based around the skeleton of HSUK's new high speed lines will:

- satisfy any reasonable requirement[9] of an 'Integrated Rail Plan';
- offer network-wide journey time reductions far greater than anything HS2, Northern Powerhouse Rail or Midlands Rail Hub can offer, *despite HS2's design for greater speed*;
- do far less environmental damage through following existing transport corridors such as the M1;
- perform far better on every conceivable comparator of network performance.

It is clear that your expert advisors have never troubled to assess how the national rail network would perform, with HS2 in place; it was never in their job description.

All these chickens will come home to roost with the forthcoming publication of the Integrated Rail Plan. You will be compelled to explain why an Integrated Rail Plan based upon HS2 performs far worse than an Integrated Rail Plan that is not based upon HS2. You will also have to explain why slavish conformance with the deeply flawed HS2 is more important than optimised performance as a regional or national network.

The challenge upon the Prime Minister and yourself, and upon your expert advisors, is simple. You must demonstrate that HS2 and its subsidiary projects will collectively comprise an Integrated Rail Plan that will deliver the optimised national network that the nation needs, and you must provide satisfactory answers to the questions[10] that I have posed – or you must take the necessary action to get the UK high speed rail project back on track, and thus bring about this optimised network.

To do nothing, and to inflict a second-best and second-rate railway network upon the people of the United Kingdom, is not an option that any voter will accept.

It is clearly vital that the Government you represent is held to account on HS2's catastrophic network performance, and I trust that you will provide a prompt response to address the concerns that I have raised. If you require any further information please do not hesitate to contact me on 07591 959134.

Yours sincerely

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[1] HS2's objective of 'hugely enhanced capacity and connectivity' was stated in *High Speed Rail: Investing in Britain's Future – Decisions and Next Steps*, published January 2012 by DfT, and repeated in evidence given to the HS2 Select Committee by HS2 Ltd Technical Director Andrew McNaughton on 30th November 2015.

[2] The 2019/20 Oakervee Review of the HS2 project made the key recommendation that the Government should develop an 'Integrated Rail Plan for the Whole GB Rail Network'. The Government accepted this recommendation, and work on the Plan commenced in February 2020, with the requirement to publish the Plan by the end of 2020. https://www.gov.uk/government/publications/high-speed-north-an-integrated-rail-plan-for-the-north-and-midlands-terms-of-reference. These terms of reference make it clear that the Integrated Rail Plan is to be based upon HS2 Phases 1 and 2a, and upon established proposals for Northern Powerhouse Rail and Midlands Rail Hub; only HS2 Phase 2b is to be considered as any sort of variable.

It must be noted that in August 2021, the Integrated Rail Plan still remains unpublished.

[3] https://www.gov.uk/government/publications/union-connectivity-review-interim-report.

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/994603/gbr-williams-shapps-plan-for-rail.pdf. The Government's pledge for 'one connected network' is made in Commitment 4, P33.

[5] The Government's ambition for a 'Net Zero' national railway network is set out in *Decarbonising Transport: A Better, Greener Britain,* DfT, July 2021.

[6] The route of HS2 has been designed for a future operating speed of 400km/h (250MPH). This would make HS2 the fastest railway in the world.

[7] Further details of the HSUK Exemplar Alternative are provided on www.highspeeduk.co.uk.

[8] Our letter to the Prime Minister submits evidence of HS2's connectivity failures in 5 appended documents:

Annex 1 –	HS2 and the UK High Speed Rail Project – the Design Disaster fully Documented.
Appendix A –	Charts showing direct intercity connectivity offered by existing network, by HS2 and subsidiary schemes, and by the HSUK Exemplar Alternative.
Appendix B –	Assessment of Integrated Rail Plan performance in Midlands, contrasting HS2 and Midlands Rail Hub with HSUK Exemplar Alternative.
Appendix C –	Assessment of Integrated Rail Plan performance in North, contrasting HS2 and Northern Powerhouse Rail with HSUK Exemplar Alternative.
Appendix D –	HSUK input to Union Connectivity Review.

The full text of the letter and its appendices is attached, and also set out on www.highspeeduk.co.uk.

[9] Appendices B & C set out structured comparisons of network performance for Integrated Rail Plans based on the full HS2 'Y-network' plus NPR & MC, and on the HSUK Exemplar Alternative. These comparisons focus upon:

- Conformance with any core specification for journey time/service frequency;
- Achievement of direct links between all principal regional cities;
- Delivery of maximised journey time reductions across regional network;
- Full integration with local services at city centre stations;
- Delivery of step-change capacity gains for local services;
- Provision of radically enhanced capacity for railfreight;
- Optimisation of direct links and journey times to principal population centres across national network.

[10] To focus our challenge to the Prime Minister, we have posed 7 simple questions which any competent Government transport advisor should be able to provide satisfactory answers:

1. How have you assessed and measured HS2's success in delivering 'hugely enhanced capacity and connectivity' between the UK's major conurbations?
2. How have you determined that HS2 is the best means of achieving this objective?
3. How have you designed HS2, Northern Powerhouse Rail (NPR) and Midlands Rail Hub (MRH) to integrate with the UK rail network, and thus achieve the best possible links between all of the UK's major cities?
4. How have you developed the Integrated Rail Plan to remedy the disconnection between HS2, NPR, MRH and the existing railway system, and thus achieve the best possible network interlinking all UK communities?
5. How have you determined that a national railway network based upon HS2, NPR and MRH will bring about the greatest possible road-to-rail modal shift, and thereby make the greatest possible contribution to reducing CO_2 and other greenhouse gas emissions?
6. Where is your network connectivity analysis, to match that undertaken by HSUK?
7. Please explain why the official proposals, variously HS2, NPR, MRH etc, perform so poorly on every conceivable criterion against the HSUK Exemplar Alternative.