



Welsh Affairs Committee Inquiry: The Cancellation of Rail Electrification in South Wales

October 2017

1. The Associated Society of Locomotive Engineers and Firemen (ASLEF) is the UK's largest train drivers' union representing approximately 20,000 members in train operating companies and freight companies as well as London Underground and light rail services. The union has over 600 members in Wales.
2. Despite promises not to under-invest in the railways and commitments to electrify the Great Western Main Line (GWML) for a "modern and efficient rail system that supports growth (...) A railway system that is faster, more reliable, less crowded, and more green"¹ the government has scrapped plans to proceed with electrification of the 60-mile stretch between Cardiff and Swansea. Instead, the Minister for Transport Chris Grayling claims that a new fleet of bi-mode intercity trains will provide the same benefits without the disruption of putting up wires and masts along routes². The simple reality is that the government has gone back on its pledge to invest in infrastructure in South - West Wales.
3. The government has tried to justify this U-turn by saying that electrification is an expensive and slow way of improving services and that bi-mode technology offers a cheaper and more effective alternative. ASLEF believes it is misleading to claim that bi-mode electric-diesel train technology is the best possible option available and it is not true that these trains truly provide all of the same benefits as a fully electrified line. Other new technology – such as digital signalling, and battery and hydrogen-fuelled trains – may eventually offer more cost-efficient alternatives to electrification, but these technologies are still in development. So while bi-mode trains will be an improvement on the existing stock, this is still a downgrade compared with the previously promised full electrification.

¹ HC Deb 16 July 2012, cc113-114WS

² House of Commons Hansard, 20 July 2017

4. We believe that a more honest admission from the government would have been that the GWML electrification programme has been scaled back due to cost increases and delays. Indeed, a report from the National Audit Office (NAO) highlighted failings in the planning and management of the 200-mile electrification project.³ In July 2009 the DfT estimated that the cost of electrification from London to Swansea was £1 billion, which would pay for itself through lower train maintenance, leasing and operating costs⁴. In 2014 the Hendy Review put the revised cost of the GWML electrification just as far as Cardiff at £2.8 billion. In November 2016 the National Audit Office put the cost at £5.58 billion, with delays to the electrification of the route of at least 18 to 36 months.⁵ Nevertheless, the decision to abandon plans to electrify the route west of Cardiff and invest in bi-mode electric-diesel trains instead is a short term money-saving solution. Passengers from Cardiff to Swansea had been promised investment in Welsh infrastructure and should not now be fobbed off with bi-modal trains using dirty diesel engines in order to pay for cost overruns between Paddington and Cardiff.
5. The arguments for electrification of the line to Swansea and the Welsh Valleys have not changed since it was endorsed in 2009. At that time we were told that electric trains are better for the climate, better for our health and better for passengers. Electrification is cleaner, greener, faster and more reliable than diesel operation.
6. One of the main benefits of electrification is a reduction in air pollution. Electric traction virtually eliminates carbon monoxide and hydrocarbons whereas bi-mode trains still produce polluting diesel engine emissions. Typically, an electric train emits between 20% and 35% less carbon per passenger mile than a diesel train⁶. Diesel engines also score badly for nitrogen oxide (NOx) and particulate emissions. When these trains operate in enclosed stations they have the potential to emit enough polluting exhaust emissions to pose a risk to passengers and railway workers. Electric trains, on the other hand, don't have a negative impact on air quality and they can be powered by renewable sources of energy such as solar and wind power.

³ NAO, Modernising the Great Western railway, November 2016

⁴ DfT, Britain's Transport Infrastructure: Rail Electrification, pp4-5

⁵ NAO, Modernising the Great Western railway, November 2016

⁶ DfT, Rail Electrification July 2009

7. At October 2009 it was estimated that 40 per cent of Britain's rail network was electrified but since 1997 only 60 more miles of track have been electrified – 50 of them since 2010⁷. If the government does not invest further in the electrification of the railways and if road transport moves to electric power, there is a risk that rail travel could lose its advantage of being comparatively more environmentally- friendly, even though it would retain other benefits including relieving congestion from the roads and safety.
8. Another benefit of electrification is the possibility of making long term savings. Electric trains are lighter, cause less track wear and have longer operational lives, which reduces maintenance costs and means that they are more cost efficient. They have fewer moving parts meaning that maintenance of these trains is simpler and cheaper, and energy consumption can be reduced using regenerative braking (slowing down trains can generate electricity which goes back into the network).
9. Passengers find that journeys on electric traction trains are quieter and smoother because they vibrate less, and journeys are usually quicker thanks to the faster acceleration of these trains when they leave stations. The benefit of trains being less noisy is also shared by those who live close to rail lines.
10. The railway network in South Wales was severely degraded following the Beeching Axe in the 1960s, with the closure of many lines. Ever since these cuts, rural communities across the South Wales Valley have been isolated from employment and shopping opportunities in Cardiff and deprived of inward investment. Links between a handful of cities – mainly in England - have been given priority while whole regions have been ignored. There has been chronic underfunding of the rail network in Wales. Figures from the Treasury's Country and Regional Analysis document show that expenditure on transport in Wales was £320 per head in Wales in 2014-15. This compares with £514 in Scotland and £600 in London.
11. In 2012 Prime Minister David Cameron promised to deliver for passengers and freight customers and to support economic growth in a way that is environmentally sustainable, saying that electrification to Swansea would "have a huge impact on extending jobs in a part of Wales

⁷ Commons Briefing paper SN05907, 27.07.17

that had been neglected of infrastructure investment". What the government is now proposing is a cheaper, less environmentally-friendly, inferior alternative.

12. In November 2014 the UK government pledged £125 million towards the estimated £295 million cost of the Valley Lines electrification scheme. This scheme has been incorporated into the £738 million Transport for Wales managed 'South Wales Metro' project which integrates heavy rail, light rail and bus-based public transport services around Cardiff, but concerns are now arising over whether electrification will go ahead or whether, again, a funding shortfall will cause the plan to be scrapped in favour of a cheaper alternative.
13. The Welsh rail network needs investment, integrating Swansea and South West Wales, and ASLEF is pleased that the Welsh Government has called for the estimated £700 million saved by the UK government's decision not to proceed with the Great Western route west of Cardiff, to be invested into other rail projects in Wales. Chris Grayling has assured that Network Rail will look at other ways of improving journey times and connections between Cardiff, Swansea and south Wales and across north Wales, and must be held to that promise.
14. In March 2016 the Welsh government set out the case for electrification of the North Wales coast main line. ASLEF believes there is a strong case for the electrification of the network in north Wales, which connects to large cities in the north west of England.
15. ASLEF does not oppose the devolution of power and responsibility for rail to regional representative bodies per se, but we have previously urged caution when looking at devolution because we are opposed to fragmentation of the railway system into different organisations run by contractors and sub-contractors. However, we appreciate that devolution would give the Welsh government direct control over the rail network and train operating companies and a greater influence over the planning and delivery of these services. We regret that the Welsh government has not pushed for the power to keep rail services in the public sector but we welcome the Welsh government's plans to establish the Transport for Wales not-for-profit company.
16. ASLEF would urge decision-makers to consider the wide range of benefits of electrification and think about reinstating the full programme. The disruption caused by engineering work and construction would be a short term inconvenience which would be worthwhile in the long run.

17. Britain has fallen well behind neighbouring countries in Europe in terms of the percentage of railway network that has been electrified and ASLEF believes this is due to the short term nature of our privatised franchise system and the fragmentation of our track and trains. TOCs lack any incentive to spend money on long term investment because they do not own franchises long enough to profit from it.

18. The decision to make short-term savings by downgrading plans to invest in electrification of lines in Wales is short-term thinking and does not offer the same value for money. Governments should be looking ahead and investing in an environmentally-friendly integrated rail network, designed to serve the needs of commuters into Cardiff and communities along other lines, to boost the economy now and as an investment for future generations.

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