

## **Electrification**

### **ATOC's view**

- The UK has one of the lowest proportions of electrified railway in Europe. ATOC thinks this should be improved and supports further electrification which will reduce operating costs, improve journey times and cut carbon emissions. We are working with Department for Transport (DfT) and Network Rail (NR) to promote its development.
- Electrification will make a significant contribution towards reducing the carbon emissions both of the rail network as a whole and Britain's transport.
- Work on planning for electrification of the Great Western has started and must start now on the Midland Mainline route to maximise the benefits of electrification and allow efficient procurement of suitable rolling stock. This means starting work before the end of CP4. ATOC has also identified a number of infill schemes which could be achieved before 2014 and which would provide considerable rolling stock benefits for limited capital expenditure, by allowing electric fleets to be used more effectively; the announcement in July 2009 in respect of Liverpool – Manchester is particularly welcome, a further announcement made in December 2009 has been an additional enhancement to include Manchester to Preston via Bolton to Blackpool North, and Wigan to Liverpool via St Helens. This adds considerable extra capacity and future flexibility to all operators in the North West.
- We believe that there is scope for a rolling programme of electrification, over 10 years. The programme should cover the TransPennine and CrossCountry routes as well as up to 200km of infill a year.

### **Background and key issues**

- There are currently only 5,250 route kilometres out of 15,795 kilometres of the UK network electrified (35%). Just over half - 55% - of all train kilometres are operated by electric trains.
- The last major electrification scheme undertaken on what is now the NR network was the East Coast Main Line in the early 1990s.
- The High Level Output Statement White Paper of 2007 was dismissive of further electrification, arguing that the developments in technology for replacement of diesel fuel in a low carbon world may render electrification pointless. Within the industry there has been considerable scepticism and there has been a change in the political view in favour of electrification.
- In October 2007, ATOC and Network Rail asked the DfT to reconsider their approach towards electrification.
- ATOC commissioned work to identify a business case for electrification. This has confirmed there is likely to be both a cost saving and a carbon case for electrification. The priority should be to electrify the Great Western and Midland Main Lines - the former being the most intensively worked diesel railway in Europe. We also urge evaluation of the electrification of the TransPennine and CrossCountry networks, as well as suburban and infill electrification in Leeds, Liverpool, Manchester and Cardiff.
- In March 2008 the then Secretary of State (Ruth Kelly) said that electrification would be part of the solution and Minister of Transport Lord Adonis has continued

to provide support for this, notably by his department's support for the Network Rail Route Utilisation Strategy for Electrification which was published in October 2009.

- In July 2009 the DfT announced plans to electrify the Great Western Mainline between London and Swansea at a cost of around £1bn, and between Manchester & Liverpool via Huyton & Newton-le-Willows at a cost of £100m.
- The challenges of electrification are driving down the cost of electrifying a km of route and integrating rolling stock plans. Operators will be closely engaged in the work to meet these challenges.

In October 2008 the Government established the National Networks Strategy Group to look at new lines and further electrification. ATOC will work with Network Rail to put forward proposals.

### **Relevant ATOC activity**

- ATOC's Rail Planning Team has identified a number of infill schemes.
- ATOC is working directly with the DfT on the case for electrification and with NR on the future development of the railways.

### **Key Documents/links**

- Department for Transport White Paper Delivering a Sustainable Railway published 24 July, 2007  
[www.dft.gov.uk/about/strategy/whitepapers/whitepapercm7176/](http://www.dft.gov.uk/about/strategy/whitepapers/whitepapercm7176/)
- Network Rail Electrification RUS Consultation Document May 2009  
<http://www.networkrail.co.uk/browse%20documents/rus%20documents/route%20utilisation%20strategies/network/working%20group%204%20-%20electrification%20strategy/network%20rus%20electrification.pdf>

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