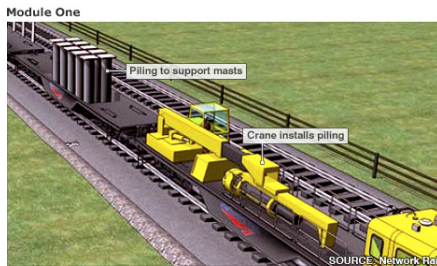


# 'Minimum rail disruption' pledged

by Jo-Anne Rowney BBC News Thursday, 23 July 2009

[http://news.bbc.co.uk/2/hi/uk\\_news/8164942.stm](http://news.bbc.co.uk/2/hi/uk_news/8164942.stm)



A 'factory train' can install 1.5km of cable in an eight-hour shift. First it drills piles at sides of track. These will hold masts to support overhead (catenary) wires.

Network Rail has promised "minimum disruption" after unveiling plans to electrify one of the main rail routes in Britain, between London and Swansea.

In the next eight years, overhead power lines will be installed and tunnels and bridges will be demolished.

Experts have hailed the move as a "positive step" for the industry.

But transport groups, while welcoming the move, are concerned that passengers could be facing major disruption while the work is being done.

Network Rail, which is carrying out the work, has assured the government that lessons in the installation of overhead power lines have been learned following last year's fiasco when work on the West Coast Main Line overran.

Simon Kirby, the company's director of infrastructure investment, said: "We've been planning this for three years, so we can carry out the work safely with minimum passenger disruption.

"We've learnt a lot from the overrun 18 months ago and we've developed new high-output technology.

"They will deliver the cables with low impact to the passenger and communities."

The new trains will install structures and cables, running on the line when services are not being run.

Network Rail says it is buying specialist electrification trains capable of automating the installation job.

It is developing 450m long "factory engineering trains", worth £30m, which will follow each other in tandem.

**"Work required to electrify these lines will mean several years of**

**disrupted services for passengers."**

*Amy Stockton, Passenger Focus*

The first train will place the pylons to hold the electric cables, followed by a second, which will hang the wires and a third, which will run checks.

The system will cover 0.93 miles (1.5km) of track in an eight-hour shift and will only operate at night ensuring "minimum disruption", says the company.

Public transport watchdog *Passenger Focus* welcomed the plans to electrify the lines.

Spokeswoman Amy Stockton said: "Passengers will recognise that these works are necessary for the long-term benefits that electrification will bring.

But the independent passenger group also acknowledged that works could potentially disrupt services for years to come.

"Work required to electrify these lines will mean several years of disrupted services for passengers," she said.

"Clearly there is a need to manage this and we will be working with the industry to ensure that passengers are given plenty of information and time to help them plan their journeys."

## 'Positive Step'

Transport analyst Christian Wolmar labelled the move as "long overdue" but a "positive step" for the rail industry.

He added: "This is finally a coherent plan that can be implemented. Electric tracks are known for their benefits. They should only cause short-term disruption. The installation should be of minimal impact."

He said, as with all new technology, it needed to be viewed "in practice before passing judgement".

The government and rail industry agree electrification will bring major benefits.

Electric trains do not carry their own fuel, which weighs around six tonnes for a diesel train, and have lighter engines.

This makes them more than 35% cheaper to run than non-electric trains, according to the Department of Transport.

They also require less maintenance and the trains are 20% cheaper to buy.

There are also major environmental benefits. The production of electricity for trains creates up to 35% less carbon

than burning the equivalent amount of diesel. The current engines do eight miles per gallon of fuel.

## 'No detailed plans'

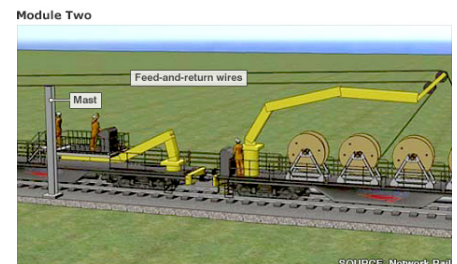
Network Rail has identified 113 structures - mainly bridges and tunnels - that will need to be altered due to lack of room for overhead wires. In some instances tracks can be lowered, but other structures will have to be knocked down and replaced.

While the company hopes to carry out the work in eight-hour periods overnight, restricting cancellations to late-evening and early morning services, demolition work will have to be carried out during the day.

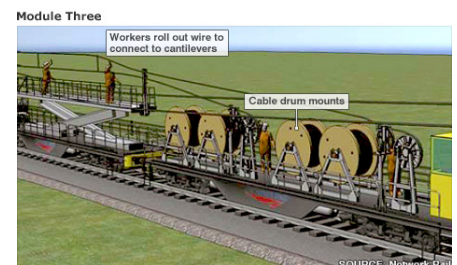
Longer closures may be needed and a spokesman for the company did admit there were not any detailed plans yet for the engineering work.

Network Rail has, however, recommended that the busiest 3,000 miles of non-electrified routes be electrified as a priority.

This includes the Great Western route from London to Wales, on which the work is now to be started.



The factory train moves along unravelling wire at steady pace. The feed-and-return wires are attached to masts to supply overhead wires with electricity.



Workers attach cantilevers (support arms) to masts and wires to cantilevers. Finally, essential earthing and safety inspections are carried out.