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HEALTH AND SAFETY COMMISSION

NATIONAL AUDIT OFFICE REPORT : IMPROVING PASSENGER RAIL SERVICES THROUGH NEW TRAINS

A Paper by John Moyer

Cleared by Allan Sefton and Nick Starling on 20 February 2004

Issue

1. Publication of a National Audit Office (NAO) report : Strategic Rail Authority - Improving Passenger Rail Services Through New Trains.

Timing

2. The report was published on 4 February. Industry leaders and Timothy Walker for HSE will give evidence to the Public Accounts Committee on 1 March.

Recommendation

3. The Commission notes, in the context of the Government's Rail Review, the NAO report and recommendations affecting HSC/E, and the position on Mark 1 rolling stock.

Background

4. During 2003, the NAO carried out a value for money study of the process for introducing new trains, with the Strategic Rail Authority (SRA) as its client. Its findings and recommendations have the potential to influence the Rail Review and add to the complexity of discussion over implementation of European rail legislation.
5. For HSC/E as rail safety regulator, two key issues arise. First, there is industry confusion on how it will be affected by European legislation, and how this will interface with HSWA. Second, and related, there is a widespread lack of understanding of the ALARP principle throughout the rail industry. Although these messages are not new – they were addressed in the Chair's speech to the industry last year, and in the legislative reform Discussion Document, Safety on the Railway – Shaping the Future, follow through communication at all levels remains important, particularly during the Rail Review period. The two NAO recommendations HSC/E is asked to lead provide further scope to do this.

6. Although the report is critical of the current process for introducing new trains, of which HSE's approvals (ROTS) regime is part, NAO have acknowledged that the industry and its regulators are now in a transitional phase into new systems resulting from European legislation on interoperability and safety. However the finding that new trains are considerably less reliable than those they replace does not reflect well on any of the stakeholders.
7. At the start of their study the NAO were informed by an 'expert panel' from the industry and its regulators. HSE was represented by a specialist inspector from HMRI technical division, before he left HSE. NAO also held bilateral meetings with stakeholders including HSE through the summer and autumn. HSE Rail and PEFD were involved in this iterative drafting process and the report, including one of the recommendations affecting HSC/E, was not finalised until the week before publication.
8. NAO's press notice summarising the report is at Annex 1 and their summary, including all 13 recommendations, is at Annex 2. A complex map of the current processes for getting new trains on the network is included in the report. An earlier version of this prepared by SRA and currently being used in industry roadshows on interoperability is at Annex 3 (this is attached to illustrate the huge complexity and not as detailed reading). The full NAO report is available from Secretariat or on the NAO website: http://www.nao.gov.uk/publications/nao_reports/03-04/0304263.pdf
9. Their main conclusions are :
 - a lack of steady demand in ordering new trains, contributing to manufacturing and managerial difficulties;
 - a lack of organisational coherence within the rail industry hinders getting new trains into service;
 - a lack of standardisation of the network, and of the trains that run on it;
 - a lack of information about the network;
 - a lack of testing capacity;
 - *a lack of clearly defined pass/fail criteria when assessing safety risks* (which is reflected in recommendation xiii, below).

NAO Recommendations

10. Most of the recommendations (listed in Annex 2) are directed at SRA and the industry. Several others impact on HSC/E and we are asked to lead work on two of them. All the recommendations are made *'to smooth new trains entry into service and deliver the expected benefits to passengers on a timely basis'*. However there is read-across in many of them to the bigger picture and the Government's Rail Review.
11. Consistent with the Review's scope, the Department for Transport is asked to *'bring the range of railway industry specifications, standards and guidance under a single body responsible for rationalising them within a single, comprehensive and coherent set of requirements'*.
12. SRA, in partnership with HSE, DfT and the Office of Rail Regulation (ORR) is asked to lead on *'assessing how the various stages in the process will be affected by European legislation and make those changes, and their timing, clear to industry'*. SRA is also asked to rationalise and streamline the process wherever possible. Depending on where a new train is going to run, there is potential for it to need both approval under

ROTS and acceptance under the interoperability regime. We continue to emphasise the need to have some form of route acceptance for rolling stock in the transition into the interoperability regime, though this may need to change from current practice.

13. Recommendation xii, although it refers to the approval of new trains, cannot be separated from the legislative reform project : *'in looking at railway safety, and as it considers how European legislation will change the process of introducing new trains, HSC should review, in consultation with all of the key stakeholders in the industry, how the requirement of "continuous improvement where reasonably practicable" should operate for the approval of new trains.'* In our discussions with ATOC, Network Rail and other parts of the industry, we continue to explain how the draft Railway Safety Directive has been negotiated so as to be compatible with HSWA and the ALARP principle, and will not require new primary rail-specific legislation. It is proposed that the safety management clauses will be implemented as rail-specific regulations made under HSWA.
14. HSE does not entirely agree with the NAO conclusion on *'lack of clearly defined pass/fail criteria for assessing safety risks'* which reflects industry confusion on ALARP. Recommendation xiii relates to the way ALARP is interpreted by the industry in the context of the existing approvals/ROTS regime, where HMRI currently has an observer role on industry vehicle acceptance panels. We are actioning the recommendation in a number of ways. These include development of a web page with links to relevant information on ALARP, revision of ROTS guidance already being updated for other reasons, and a proposed industry seminar with members of the NAO's panel including SRA.

Withdrawal of Mark 1 Rolling Stock

15. The NAO findings provide further indication that the statutory deadline of 31 December 2004 in the Railway Safety Regulations 1999 (RSR) is unlikely to be met (without significant curtailment of London commuter services). We reported the likely need for Mark 1 (slam door) rolling stock to continue in operation into 2005 to the Commission last autumn (MISC 03/26). NAO accept the 2004 deadline was not HSC's original recommendation, but say they *'were unable to find any evidence...'* from 1999 of work by SRA and DfT's predecessors *'...to check removal by that date was feasible'*. The report explains the earlier problems the industry had but acknowledges the progress made by SRA with Network Rail and train operators since 2002.
16. SRA forecasts currently suggest a residual number of slam-door vehicles, possibly 500, will be required to continue running into the third quarter of 2005. A further review meeting with the industry and other regulators was hosted by HSE on 13 February. HSE expects to receive an application for an exemption (subject to a time limit) soon. When considering exemptions under RSR, HSE considers *'all circumstances of the case'*. Should HSE be minded to grant an exemption the Commission, passenger groups and trade unions will be among those consulted.

Consultation

17. With PEFD, who have been actively involved in HSE's input to the NAO study.

Presentation

18. Publication of the report attracted significant media coverage as a negative story about the rail industry. SRA welcomed the report and stressed they were already addressing many of the recommendations made in it, eg. Southern Region new trains project and power supply work. Media coverage made little reference to HSE and recognised the safety and other benefits from withdrawing slam-door trains. Rail Magazine incorrectly attributed the setting of the 2004 Mark 1 sunset date to HSE, among other inaccurate and anti-HSE coverage in its 18 February edition. The Public Accounts Committee hearing and subsequent report may attract further media coverage.

Costs and Benefits

19. None from this paper.

Financial/Resource Implications for HSE

20. Not significant or longer-term. Work on HSE's response to the NAO recommendations will be covered (apart from PEFD input) by our Cullen funding, principally as part of the legislative reform package which links with Recommendation 13.

Environmental Implications

21. None.

Other Implications

22. None.

National Audit Office Press Notice

Report by the Comptroller and Auditor General

Strategic Rail Authority: improving passenger rail services through new trains

HC 263 2003-2004

4 February 2004

ISBN: 010292712X

New trains on Britain's railways are bringing significant benefits to passengers, according to a report by the National Audit Office. Most have been late entering service, however, and it is unlikely that the statutory deadline of December 2004 for removing all the oldest slam-door trains from the network will be met. Lack of capacity to test trains before they enter service has contributed to new trains often being less reliable than the old trains they have replaced.

Since the railways were privatised in 1996, the 25 Train Operating Companies (TOCs) providing passenger rail services have ordered more than 4,500 new carriages worth some £4.2 billion, of which over 2,000 have now entered service. New trains are being introduced to replace all of the oldest slam-door trains to improve safety, to meet the TOCs' commitments under their franchise agreements with the Strategic Rail Authority (SRA), or for commercial reasons.

According to today's report to Parliament by head of the NAO Sir John Bourn, the new, more sophisticated rolling stock generally provides a better journey experience for passengers, offering a quieter ride, brighter and cleaner interiors, wider doors and often air conditioning and passenger information systems. New trains also deliver improved safety and security and better facilities for passengers with disabilities.

New trains are not, however, bringing all of the passenger benefits that they should. Passenger groups consider that manufacturers and TOCs have failed to consult sufficiently early with passengers, and have complaints about the layout of some new vehicles and that new rolling stock is not always fully accessible to passengers with disabilities. On some routes, passenger numbers have grown faster than the number of carriages ordered and the railway infrastructure's ability to accommodate more frequent or longer trains. In addition, all of the TOCs that run new trains have experienced reliability problems: most commonly concerning mechanical failure, on-train computers and air conditioning.

Some 400 of the oldest slam-door trains have been replaced; a further 1,600 remain in service. Delays in delivering new trains - ranging from a month to more than two and a half years - and in making essential upgrades to the power supply and other infrastructure on Network Rail's Southern Region (the work did not start until mid-2002), mean that the December 2004 deadline for taking all of the oldest slam-door trains out of service is unlikely to be met. Some 300 new carriages might be ready to enter service in early 2004, but be prevented from doing so if essential infrastructure upgrades are not completed by

then. The SRA and the industry have managed down this backlog, but the taxpayer might have to meet potential liabilities of more than £7 million.

Today's report recognises that bringing new trains into service is a complex task, involving at least nine organisations and 60 key stages. One of the reasons why new trains have entered service late and have poor reliability is manufacturing and managerial difficulties due to a lack of steady demand for new trains in the two to three years leading up to privatisation in 1996. Other reasons are a lack of organisational coherence within the rail industry - not all of the key parties involved have common interests in, or have had enough incentives for, the smooth introduction of new trains; and the absence of standardisation of the network and trains, so that trains have to be individually tailored for their routes. There has been a lack of information about the railway infrastructure, making it difficult for manufacturers to build trains compatible with the network. There is a lack of clearly defined pass/fail criteria for assessing safety risks; and, because there is no national facility for testing trains off the network and finding time and space on the network to carry out tests is difficult, new trains have been put into service without sufficient testing in all conditions, contributing to reliability problems when the trains are in service.

The SRA cannot by itself bring reliable new trains into service on time, and has therefore started to work with the industry to bring about improvement. But more needs to be done, in particular, to align the incentives and commercial interests of the various bodies involved to make it easier to introduce new trains on time, improve opportunities for testing trains before they go into service, put in place a realistic timetable for their introduction, and rationalise and streamline the process where possible.

The Department for Transport should work with the SRA and other stakeholders to bring the many different railway industry standards under a single body with responsibility for producing a single, comprehensive and coherent set of requirements. Working together, the SRA and the Health and Safety Executive should clarify for the industry how the various stages in the current process will be affected by European legislation, where there is currently considerable confusion about what impact the legislation will have on the process. With in-coming European legislation requiring continuous improvement in safety where reasonably practicable, the Health and Safety Commission should review, with all of the key stakeholders in the industry, how this requirement should operate for the approval of new trains.

Sir John Bourn said today:

"While some passengers are enjoying the improved facilities and ride provided by new trains, many others are still waiting for their new trains to enter service. And too often the trains turn out to be unreliable in everyday use because they haven't been sufficiently tested. The Strategic Rail Authority needs to redouble its efforts to help get new trains into service on time and running reliably for the benefit of passengers and the taxpayer. "

Notes for Editors

1. The government established the Strategic Rail Authority in February 2001 to deliver strategic leadership to the rail industry. Under Directions and Guidance set for it by the Secretary of State for Transport, the SRA is required to ensure that rolling stock is available so that passengers travel in appropriate modern standards of comfort and safety.

2. European legislation is introducing common checking and approval processes and Technical Specifications for Interoperability (TSIs) in place of the existing Railways and Other Transport Systems (ROTS) regulations that govern the acceptance of new trains onto the network. The legislation is intended to make it easier for train operators to run services uninterrupted across different EU networks and to promote free trade in rail products between EU member states. The legislation is expected to have a considerable impact on the requirements for the design, construction, operation and maintenance of Britain's railways.
 3. The Comptroller and Auditor General, Sir John Bourn, is the head of the National Audit Office which employs some 800 staff. He and the NAO are totally independent of Government. He certifies the accounts of all Government departments and a wide range of other public sector bodies; and he has statutory authority to report to Parliament on the economy, efficiency and effectiveness with which departments and other bodies have used their resources.
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Annex 2

NAO Summary and Recommendations (Attached Separately)

Annex 3 – Current SRA New Trains Process Map

“Acceptance processes are too complicated today”

