

INTRODUCTION

1. I am Jenny Bacon, Director General of the Health and Safety Executive (HSE). I joined HSE in March 1992 as Deputy Director General (Policy) where my responsibilities included oversight of the preparation of the new regulatory regime to apply to the privatised railway; I was also a member of the three-person statutory Executive constituted under section 10 of the Health and Safety at Work etc Act 1974 (HSWA). I was appointed Director General with effect from July 1995. I am a career civil servant by background, having joined the Ministry of Labour in 1967 from university. I have been a member of the Senior Civil Service since 1978. My experience before 1978 included leading the team responsible for preparation and passage of the HSWA following the report of the Robens Committee on Health and Safety at Work. Since 1978 I have worked in a variety of Government Departments and bodies (the Manpower Services Commission and its Training Service Agency; the Department of Employment; the Machinery of Government Division now in the Cabinet Office; Department of Education and Science) and in a variety of policy, managerial, executive and finance roles. I have served in a non-executive capacity on a number of public, charitable and academic bodies.

2. This Statement covers two reports prepared by an Internal Inquiry Team set up by the Executive in accordance with HSE practice following a major accident. The Internal Inquiry Report (IIR) deals with events leading up to the Ladbroke Grove rail accident on 5 October 1999. The General Issues Report (GIR) offers advice to the Executive on some general issues arising from the Team's examination of evidence, stretching back over a decade, relevant to the Ladbroke Grove accident. IIR paras 6-14 and Annex 1 give the background, Terms of Reference and membership of the Inquiry Team.

3. I believe that the Internal Inquiry Report is of particular relevance to Part 1 of the Ladbroke Grove Rail Inquiry (LGRI); the General Issues Report may be more applicable to Part 2, but provides context for the Team's main findings in the Internal Inquiry Report. I should emphasise that we do not intend the findings and conclusions in either Report to prejudge the findings of the LGRI, which will look much wider. There are some points which the Executive thinks must be addressed immediately; but actions now will not prevent further or different action to implement recommendations from LGRI.

The Internal Inquiry Report

4. The main issues arising are summarised in IIR para 82. They focus attention on:
- € the system and process of approvals of works, plant and equipment - a regime described in GIR paras 8-21.
 - € HSE activity relating to signals passed at danger (SPADs).
 - € interventions and enforcement action by HSE relating to the signalling at Ladbroke Grove, and to SN 109 in particular.
5. The Executive is especially concerned by the length of time taken for approval of the Paddington signalling layout and the slow progress by both the duty holder

(Railtrack) and HSE in bringing issues to conclusion. The inadequate risk analysis and assessment by Railtrack of problems at SN 109 following the major SPAD in February 1998 were not pursued by HSE beyond initial queries: this is regretted.

The General Issues Report

6. The Team's concerns are:

- € aspects of the approvals process (GIR para 29)
- € use of safety cases (GIR para 65)
- € intelligence, risk assessment, operational and enforcement action in relation to SPADs (GIR para 101)

The Team's conclusions (GIR paras 121-128) focus on timeliness and appropriateness of action, and on questions about communications and culture within HMRI.

7. The Team recognised that the evidence it looked at related to the Ladbroke Grove accident and not to the work of HSE/HMRI as a whole; generalisation from the particular could be misleading. The Team has also made clear that a great many of the issues raised relate to the situation prevailing some time prior to the accident, and that welcome actions have been taken over the last two years to tackle problems - and are continuing. Nevertheless, the Executive recognises the essential correctness of the picture painted by the Team, in the particular circumstances of the accident and generally. With the benefit of hindsight, the evidence suggests that, until fairly recently, more could have been done by HSE in relation to the railway to enforce health and safety legislation. This the Executive also regrets.

REGULATION OF THE RAILWAY

8. The Executive believes that four main areas of its activities need to be addressed to ensure that the improvements already begun are continued and where necessary speeded up:

- € the regulatory regime, including the roles of safety cases, approvals and specific regulations
- € the application of the law, including approaches to enforcement action
- € the organisation, workings and culture of HMRI, within HSE and within HMRI itself
- € the resources and expertise available for the regulation of health and safety on the railway.

9. But the Executive also recognises that this was an evolving situation. The origins, background and changes in circumstances of the industry, of HMRI and of the regulatory regime are highly relevant to analysis of where we are now. Faced with these gradual changes, the point at which radical change of approach to regulation became appropriate was hard to identify.

10. The IIR, paras 15-28, outlines the history of railway safety regulation in the 1990s. Four major factors affected regulation of the industry in this period:

- € privatisation: resulting in a new industry structure, new relationships to be forged following the fragmentation of BR's responsibilities, new commercial freedoms and pressures - and new regulatory regimes, for safety and for commercial operations.
- € deregulation: the overall government policy of deregulation, of minimal regulatory intervention, and of limited resources to match affected both the new regime put in place and its application.
- € growth of the industry: in numbers, parties and duty holders involved, in passenger use of the network, and in investment in new infrastructure and rolling stock. This in turn meant considerable growth in the workload of HMRI - on major new works (such as the West Coast Main Line, the Channel Tunnel, the Jubilee Line Extension, Heathrow Express, Automatic Train Protection (ATP) fitment) and on approvals generally.
- € reduction in the clarity of responsibilities of duty holders. This was a consequence of the loss of a single focus in the main rail network for making improvements in safety. There was a further lack of clarity in the duties of different regulators and standard setting bodies, and in the experience and expertise available in the industry - of owners, operators, contractors, maintenance staff, drivers and others.

11. Nonetheless, as the GIR paras 3-6 illustrate, the overall picture was of an improvement in safety and in the accident record in the industry during the 1990s. HSE/HMRI identified the main sources of accidents and addressed them, successfully for the most part. These included:

- € slam doors
- € trackside safety
- € broken rails
- € level crossings
- € fires
- € rolling stock issues, including regulations for replacement of Mark 1 rolling stock passed in 1999
- € trespass and vandalism - by far the largest killer on the railway, a major source of hazard and the subject of studies and a current campaign
- € need for train protection systems, including work to ensure pilot fitment of ATP and preparation of the regulations passed in 1999 to secure fitment of Train Protection Warning Systems (TPWS) and of ATP where reasonably practicable.
- € SPADs - resulting in the SPAD study published in September 1999 and the resulting programme of action
- € human error - sponsoring research into fatigue and shift patterns, and developing guidance on management of competence.

12. However, this picture of safety performance on the railway gave false comfort in some respects: it is now clear that consideration of SPADs (GIR paras 80-95) was based on incomplete data. Moreover, other concerns were emerging, documented in, for example, the Chief Inspector of Railways' Annual Reports, about changes in the industry and the problems they posed for safety regulation.

The regulatory regime

13. The regulatory regime put in place in 1993 to accompany privatisation of the BR network and liberalisation of the railway rested on a number of assumptions about the structure of the privatised network which are no longer valid. First, HSE had recommended strongly that privatisation should be based upon a low level of fragmentation of the industry, so as to minimise the number of interactions and interfaces between parties which needed to be managed and regulated. This was accepted initially; but subsequently the number of parties has grown to over 120.
14. Second, the original assumption was that Railtrack - the infrastructure controller - would remain a public sector body. Responsibility for setting detailed standards was allocated to the infrastructure controller on that basis. However, Railtrack was privatised in 1996.
15. Third, the safety case 'cascade' system places heavy reliance on self-regulation and regulation through contractual relationships. This was based on two assumptions: that there would be a limited number of parties with the capacity to import risk onto the railway; and that in safety case acceptance at the second level of the cascade (ie infrastructure controller acceptance of train operating companies safety cases) the non-privatised infrastructure controller would be free from commercial constraints.
16. Fourth, the approvals procedures, which pre-dated privatisation and the safety case regime, were introduced into the new regime in 1993 on the assumption that there would be substantial simplification of the standards. This has not happened.
17. The present situation compares unfavourably with the original assumptions:
 - (a) the present regulatory approach does not appear to offer sufficient assurance to the public because the commercialised rail industry is also subject to pressures from the economic regulator and from shareholders. (This is emerging as an issue in other industries besides rail.) To compensate for this, there is an expectation of far greater regulatory involvement. Certainly the Executive now thinks that more intervention than was originally envisaged is both justified and necessary in the light of experience of how the industry in fact operates.
 - (b) the safety case cascade scheme is not operating as intended. HSE was already reviewing and evaluating the scheme; and the DETR-led Rail Safety Policy Review has recommended that HSE should be responsible for final acceptance of TOC safety cases. This will require much more involvement than hitherto.
 - (c) the approvals system. This is protracted and entails considerable engagement by the regulator with the duty holders' risk assessments and engineering judgements. The system lends itself to a piecemeal approach by the duty holders, who do of course have overall responsibility. The GIR (paras 23-29) also identifies problems in applying the regulations. The law is not straightforward, and misunderstandings based on practice under earlier legislation are regretted.

Regulation in practice

18. Concerns about approvals are raised above. Other issues include:

€ Risk assessment

The industry culture appears to look at outcomes, with insufficient attention to potential for harm, and at frequencies rather than consequences: the approach to SPADs is an example of this. Assessment of risks is also dominated by 'hardware' issues and a rigid use of quantified risk assessment (QRA), with insufficient appreciation of human factors: risk assessment of signalling systems exemplifies this incomplete perspective. The concern is that HSE should have done more to challenge the industry effectively.

€ Enforcement action

There is some evidence that HSE has not had the confidence, nor the resource, to confront the industry's challenge to formal enforcement and to use the powers available. Consequently, enforcement action has been insufficiently tough and timeous, and there has been a lack of follow-up and follow through on regulatory advice offered.

19. A number of changes and improvements have been made in the last 18 months - 2 years to secure compliance. But in order to judge how best to remedy the underlying problems in HSE that these criticisms suggest, we have asked ourselves why should HMRI be encountering these difficulties? A number of factors suggest themselves; first, the grafting of a new system onto an old industry; second, the lack of familiarity with a goal-setting approach; and third, an absence of criteria for making professional judgements. Undoubtedly other factors have included slim resources for HMRI in relation to an expanding workload, and the inevitable lag between the need for more resources and their availability (see GIR paras 116-120 and Annex 2). But what also comes across is the gradual reduction of trust in the industry after privatisation. The idea of BR's public sector responsibility as something to be relied on has died hard, and indeed was perpetuated by Railtrack's initial assertion that it was the 'directing mind' for safety on the railway. Reality has not lived up to expectation, but expectation has affected HMRI's attitudes to industry standards, to enforcement and toughness, and to checking, follow-up and follow through.

The organisation and workings of HMRI

20. These issues raise questions about the organisation and workings of HMRI, brought out in both the Team's reports. Issues include:

- (a) internal organisation of HMRI into functional Divisions in 1994 (approvals, assessment, operations). This was deliberate, so as to create 'Chinese walls' between different statutory roles, but appears to have reduced the intended benefits to be had from the safety case regime and to have enhanced the difference in character of the approvals procedures;
- (b) insufficiently effective information exchange between the parts of HMRI, and from HQ to the field, particularly on approvals and on SPAD data.

(c) need for improved manual and electronic information systems. Lack of these have contributed to the use of inadequate data, particularly on SPADs, with which to challenge the industry's approach.

(d) insufficient resources, insufficiently prioritised in use. Staff and inspector numbers have grown (doubling since 1991) but supply has lagged behind demand, particularly recently. This has reflected the original expectation of a light regulatory approach, and has contributed to lack of formal enforcement action and delay in following up actions required from the industry.

21. Overall, there have been historical 'culture' differences between HMRI and HSE generally. HMRI was transferred to HSE in December 1990 but until 1996 operated under an Agency Agreement between the Secretary of State for Transport and HSC, for HMRI to perform functions on the Secretary of State's behalf. This Agreement expressly prevented full integration of HMRI into HSE, organisationally, procedurally and culturally: many in HMRI saw its main link and accountability as back to the Department of Transport rather than to HSC/E, and the Agency Agreement set in stone HMRI's separate organisation within HSE and thereby its 'engineering' foundation and outlook. These conditions were not propitious for a successful grafting of HMRI onto HSE; nor for proper and timely management responses to emerging problems.

22. As the two Reports make clear, this situation has been addressed over the last two to three years. Since 1996 the strong separate link back to the Department has been severed in most respects - formally though not always in practice. HMRI senior management responded by initiating important changes. Staff interchange with other parts of HSE has increased - not least to help HMRI grow to cope with work demands. HMRI senior management also made efforts to improve cultural interchange eg on risk assessment approaches, use of safety cases, and training. Enforcement action has been pursued more vigorously. The backlog on approvals has been tackled and the work prioritised. Communication within HMRI has improved.

23. However, HMRI senior management did take a deliberate decision to aim for 'evolution not revolution' in making changes, given the need to keep operations going. They and the Executive now judge that this position is no longer sustainable, in the light of developments and culture changes in the industry. Both the organisational and cultural separation of HMRI, and the resources available to it, needed to be addressed more urgently and action is underway.

ACTIONS TO SECURE IMPROVEMENTS

24. Together with HMRI, the Executive, and HSC where appropriate, have set in hand a number of measures to address the problems and shortcomings identified above.

Improvements to the regime

25. The HSC intends shortly to go out to formal public consultation on proposals for regulations to transfer responsibility for final acceptance of TOC safety cases from Railtrack to HSE. It intends also to consult about changes to the approvals requirements. These should help duty holders and HSE to prioritise the works which need early approval, and to allow for temporary exemptions and conditional acceptances. These proposals are made in pursuance of HSC's statutory duties and are not intended to prejudge the outcome of Part 2 of LGRI.

26. HSE is also working on proposals for different options for handling initial integrity issues on the railway, including approvals, so as to bring the approvals regime more into line with those in high hazard industries. Options include categorisation of works according to risk; removal of approval by the regulator in low risk areas; and third party verification against codified standards by accredited bodies.

Safety cases

27. Work to tighten the criteria for assessment of safety cases has already been done and improvements are being sought in the content of the Railtrack safety case. If the proposed regulations (para 25 above) are endorsed, HSE's enhanced role in TOC safety case acceptance offers the chance for further improvement in the coverage, content and clarity of safety cases, and this in turn should improve their usefulness as the basis for inspection and audit. HMRI is being strengthened by the addition of inspectors with experience of working with safety cases from elsewhere in HSE, and by further training on safety case handling generally. The objective is to ensure that the safety case is a central part of the regulatory process in practice as well as on paper.

Approvals

28. In addition to the work on legislative requirements referred to above, immediate work is in hand to prioritise the case load on approvals, to draw up criteria for temporary exemption of minor works, and to speed up approvals of high priority works (though action by the duty holder may often determine the timetable). These measures are necessary to cope with the greatly increased volume of approvals.

Enforcement action

29. Challenges to HSE's use of enforcement powers have recently been made in the Employment Tribunal in the form of appeals by Railtrack against a Prohibition Notice and two Improvement Notices issued shortly after the Ladbroke Grove accident. Two of these appeals have been dismissed and the decision in the third is awaited. If clarification of the law, or of guidance on its interpretation by inspectors and others, appears necessary following these cases, HSC/E will act: the objective is to ensure that HSE is not deterred by legal uncertainty from taking enforcement action where it appears to be merited.

30. Other enforcement activity includes follow-up on implementation of the 1999 Regulations to ensure action on fitting TPWS, and ATP where reasonably practicable. The action required by the SPAD Management Audit, published in September 1999, is also being pursued. The latter was a resource intensive but important safety exercise and has already produced results.

Organisation and working of HMRI

31. The Executive has taken steps to brigade HMRI within HSE's Field Operations Directorate (FOD) with effect from 1 May. The purpose of this organisational change is to ensure that HMRI has full support from the planning, IT, communications and other management systems operating in HSE's largest Directorate. The change will also make easier staff and 'culture' interchanges between HMRI and the rest of HSE eg. on approaches to risk assessment and risk management, use of FOD's Enforcement Management Model for planning, targetting and managing regulatory intervention, and common training for inspectors eg. on use of safety cases. HMRI will remain a distinct Division, under the Chief Inspector, but brigading it within a larger operational command also makes possible reorganisation of functions within HMRI to allow for better team working. Overall, the change will release resource for regulatory action including enforcement, and accelerate the evolutionary moves already taking place within HMRI to apply the post-privatisation regulatory regime and to carry out a proper challenge function to the industry. The change is not, however, irreversible and is certainly not intended to pre-empt wider judgements from Part 2 of LGRI about the organisation of railway safety regulation.

Resources

32. The organisational changes described above will free up some inspector time. In addition, inspector resources from elsewhere in HSE are being transferred to HMRI. HSE is also currently recruiting railway specialists with a view to increasing inspector numbers from 64 to 71 and has bid for further resources to deal with the increasing workload eg. on safety case acceptance. HSE will continue to 'buy' specialist help as necessary, either from our own Health and Safety Laboratories or from elsewhere, to supplement HMRI's expertise. The Executive wishes to acknowledge and thank HMRI for their continuing hard work to keep pace with increases in work, and to pay tribute to their professionalism and commitment.

Research

33. HSE is commissioning further research on human factors to help understanding of the data on SPADs and accidents, and to inform and thus improve risk assessments and the regulatory process.

CONCLUSION

34. The Internal Inquiry reports have highlighted or brought to a head a number of issues which clearly need to be addressed to improve the regulation of a very much changed industry and the Executive is grateful to all members of the Team for providing so detached and thorough an assessment. The issues are relevant to consideration of what happened at Ladbroke Grove and to the discharge by duty holders of their responsibilities; but the object of the Internal Inquiry was to concentrate on HSE issues and actions. The Executive has put in hand changes to tackle points of concern and, in particular, to speed up developments which were already taking place following the privatisation of Railtrack, modification of the Agency Agreement with the Secretary of State for Transport and, most notably, the Southall accident. Developments in the industry, and the experience of the Ladbroke Grove accident, demand different priorities, with more focus on SPAD management and follow through of the regulations requiring appropriate installation of TPWS and ATP. But the Executive will aim to ensure that other matters eg. broken rails, which bring risk to the railway are not underresourced. Overall, the Executive believes that HSE's Internal Inquiry procedure has been put to good use for securing improvements.

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