



THE LADBROKE GROVE RAIL INQUIRY

PART 1 REPORT:

HSC ACTION PLAN

Progress Report to December 2001

Ladbroke Grove Rail Inquiry Part 1 Report: Progress Report to December 2001

Background

Thirty one people lost their lives in the train crash at Ladbroke Grove in October 1999. Many others were injured. The Health and Safety Commission (HSC) appointed Lord Cullen to conduct a public inquiry into the causes of the collision; his Part 1 Report was published on 20 June 2001. The HSC remains determined that the Inquiry recommendations will be acted on and believes successful implementation of the recommendations will play a part in preventing any similar future catastrophic accidents.

The Health and Safety Executive (HSE) worked with industry during the summer of 2001 to develop an action plan, which was published in November 2001. This summary report gives a picture of the reported progress for the six-month period ending December 2001.

HSC's Review of Progress

Industry has provided much information to show what action has been taken to meet the requirements of the Recommendations in the Ladbroke Grove Public Inquiry Report. Their detailed progress reports have been summarised here.

Of the 89 recommendations in the report, Lord Cullen proposed that 40 should be completed by December 2001: industry report that 23 actions have been completed. Of the remaining 17 recommendations, industry report that 11 will be completed by June 2002 and the balance by September 2002.

Of these 40 Recommendations, Lord Cullen designated 25 as key recommendations (shown in the table as "Cullen Central Recommendations"): industry report that 17 of these have been completed. Of the remaining 8 key recommendations the timetable is proving difficult to achieve and accordingly, HSE has accepted revised timescales for completion. In particular,

- Recommendation 29 where Railway Safety wishes to consult on the content of the standard; this will take it outside the Cullen timescale.
- Recommendations 33 and 34 relating to reporting of SPADs, where the timescale would not permit the degree of consultation which Railway Safety considers desirable in this case;

HSE has reviewed industry's reports of progress and judges that satisfactory progress has been made. Details are given for all recommendations on the attached summary.

Future monitoring of recommendations

Some of the Recommendations have short-term actions under this report, but longer-term activity on the issue links into the wider safety agenda, including that arising from Lord Cullen's Part 2 Report. These include Recommendation 17 on developing the rail industry's safety culture, Recommendations 20 and 21 on safety audits and Recommendations 14, 15 and 16 on developing train driver competencies, including a national licensing scheme. It will be important not to lose sight of Lord Cullen's priorities for these Recommendations when developing the longer-term strategy.

We have been considering the most appropriate way to report future progress on implementation of the Public Inquiry Reports. We propose that this will be the only report that concentrates solely on the recommendations arising from Lord Cullen's Part 1 Report. Single progress reports on Southall, the Joint Inquiry into Train Protection and Lord Cullen's Part 2 Report are due later in the spring. From autumn 2002, HSC will publish one progress report on a six-monthly basis. The report will discuss progress under eight broad headings. These headings contain all the 295 Public Inquiry recommendations (Southall, as far as it is still relevant, the Joint Inquiry and the two Cullen Reports).

We believe that presenting the information in this format will help everyone involved to gain a better appreciation of the overall safety benefits being delivered as well as sharpening the focus on key issues. Those parts of the rail industry with actions on them, will continue to provide information on a recommendation-by-recommendation basis but the six-monthly updates will cover all four Public Inquiry Reports. HSC/E will continue to track action on each recommendation, to ensure that none are overlooked.

Health and Safety Commission
March 2002

Abbreviations

ACOP	Approved Code of Practice
ACPO	Association of Chief Police Officers
ACPOS	Association of Chief Police Officers in Scotland
ATOC	Association of Train Operating Companies
BTP	British Transport Police
CIRAS	Confidential Incident Reporting and Analysis System
CSR	Cab Secure Radio
DOO	Driver-Only Operation
ERTMS	European Rail Traffic Management System
FGW	First Great Western
FOC	Freight Operating Company
HMRI	Her Majesty's Railway Inspectorate
HRA	Heritage Railway Association
HSC	Health and Safety Commission
HSE	Health and Safety Executive
IECC	Integrated Electronic Control Centre
LUL	London Underground
LTUC	London Transport Users Committee
NSTF	National Safety Task Force
NVQ	National Vocational Qualification
ORR	Office of the Rail Regulator
RGM	Railway Group Members
RGS	Railway Group Standard
RITC	Rail Industry Training Council
RSC	Railway Safety Case
RSRP	Railway Safety Research Programme
ROSCO	Rolling Stock company
RIAC	Railway Industry Advisory Committee
RPC	Rail Passengers Council
RS	Railway Safety
RT	Railtrack
SMIS	Safety Management Information System
SPADs	Signals passed at danger
TENs	Trans European Networks
TT	Thames Trains
TOC	Train Operating Company

Support of the bereaved and injured (recommendations 1 to 4)

Recommendation 1

The system for the reception of information about missing persons, casualties and survivors should be computerised. It should be possible for information which has been received to be entered directly into the computer and for information from it to be provided, to the extent appropriate, to callers. There should be a set procedure for the returning of a call. Paragraph 4.119 refers.

Action on ACPO, ACPOS

Action Plan

ACPO and ACPOS to complete rollout of a National Casualty Bureau, ensuring that it has the facility for direct computer entry and a system for returning calls, by December 2002. Appropriate staff training to be completed to the same timescale.

Progress Report January 2002

ACPOS/ACPO report that Holmes 2 system is fully functional in three forces and the others will be fully functional before December 2002. The rollout programme in the remaining two forces is still under discussion.

Status

Action complete in Scotland, progress made in England, Wales and Northern Ireland, with completion due by December 2002.

Recommendation 2

Computerisation should be extended to all police forces, so that the information collated by each is readily available to all others. Paragraph 4.120 refers.

Action on ACPO, ACPOS

Action Plan

ACPO and ACPOS to secure completion of national rollout of the system to all police forces.

Progress Report January 2002

ACPOS report that computerisation has been fully implemented in Scotland; all information from callers is entered directly onto computer and will be available to the host force collating the information. ACPO report that with the exception of two forces, computerisation will be extended to all forces in England, Wales and Northern Ireland by December 2002. The rollout programme in the remaining two forces is still under discussion.

Status

Action completed in Scotland. Completion in England, Wales and Northern Ireland due by December 2002.

Support of the bereaved and injured (recommendations 1 to 4)

Recommendation 3

The police service, in co-operation with the emergency services, should use their best endeavours to ensure that common telephone numbers are issued for the use of members of the public who are seeking to give or obtain information about persons who have, or may have, been involved in a major incident. Paragraph 4.121 refers.

Action on ACPO, ACPOS By 20/12/2001

Action Plan

ACPO and ACPOS to set up a system to ensure that local police forces, in co-operation with emergency services, provide a common telephone number (where not already in place) for use by members of the public who are seeking to give or to obtain information about persons who have, or may have, been involved in a major incident, by December 2001.

Progress Report January 2002

ACPOS reports that linked telephony continues to be used by all Scottish forces and is regularly tested. ACPO report that they have a project to develop a common telephone number. This will include a 'bank' of common numbers that may be needed in the event of multiple disasters both in the UK and elsewhere.

Status

Action complete in Scotland. Project well underway in England, Wales and Northern Ireland, but original timescale not feasible. HSE and ACPO discussing revised timescale.

Support of the bereaved and injured (recommendations 1 to 4)

Recommendation 4

The Railway Group should review emergency planning, including liaison with the emergency services, arrangements for the aftercare of survivors and the provision of support and facilities for the bereaved and injured. Paragraph 4.122 refers.

Action on Railway Group Members By 20/12/2001

Action Plan

RS to complete the review by December 2001. The review should include details of future actions. RS to include RPC's in the consultation, together with representatives from the survivors / relatives groups. ATOC to complete the review of their ACOP on 'Joint industry provision of customer care following a major passenger rail accident' in sufficient time to allow RS to complete their review. The mechanism for delivering actions to be reviewed after December 2001.

Progress Report January 2002

RS state that the review and publication of the RGS will not be complete until April 2002; the total number of RGS to be reviewed made December 2001 impossible. RS report that the after-care of survivors and the provision of support and facilities for the bereaved and injured are in GO/GN3672 and liaison with the emergency services is in GO/RT3471. Accident and emergency planning and accident management are in GO/RT3471/2 and RS has reviewed these standards and the associated guidance notes and expects to issue them in April 2002 for compliance by June 2002. ATOC report that they have reviewed their ACOP and passed to RS in September 2001. LUL report that they conduct multi-agency tabletop and live exercises annually: there are plans to involve local authority welfare officers in these exercises.

Status

Action substantially complete, revised RGS scheduled for issue in April 2002 and will be implemented by June 2002.

Track and signalling changes (recommendation 5)

Recommendation 5 Cullen central recommendation

Where a material change to track or signalling or both is proposed, there should be an express consideration of all relevant safety issues by an analysis of the material factors, if necessary by means of a risk assessment. This should be done on a holistic basis at the design concept stage and repeated at defined stages up to and including full implementation. Paragraph 7.17 refers.

Action on Railtrack By 20/12/2001

Action Plan

For new proposals for material changes to track and signalling, RT will, immediately, include an express consideration of all relevant safety issues by an analysis of the material factors, if necessary by means of a risk assessment. RT will review the relevant RGS, by December 2001, and if necessary submit a proposal for revision. RT will establish a 'Centre of Excellence' for all disciplines involved in layout design, by December 2001.

Progress Report January 2002

RT has appointed a manager to lead the 'Centre of Excellence' and existing standards have been reviewed and guidelines have been formulated for scheme design, including the use of risk assessment, where appropriate.

RS report that RGS GI/RT7006 and supporting guidance note GI/GN7606, prevention and mitigation of overruns – risk assessment, were issued in December 2000, replacing GK/RT0078. Some other factors in para 7.17 of the Cullen report are addressed in part by measures in other RGSs – RS will undertake a systematic review of both the adequacy and completeness of those measures.

LUL report that they already have processes in place to ensure all relevant factors are considered when track and signalling changes are planned.

HRA will recommend that this policy be adopted, where appropriate, although in most cases heritage railways have fairly simple track layouts that rarely change.

Status

Action completed.

Implementation of Formal Inquiry recommendations (recommendations 6 and 7)

Cullen central recommendation

Recommendation 6

Railtrack procedures, and the actions of management to enforce them, should be directed to ensuring that:

- i. A recommendation which is accepted is implemented according to a defined timescale;*
- ii. The person to whom a recommendation is allocated for implementation is required to report periodically the action which has been taken, the state of progress and the reasons for any delay;*
- iii. The monitoring of the implementation of a recommendation is assigned to an identified individual whose duties are clearly defined, whether by job description, formal instruction, or training or a combination of these methods;*
- iv. The person to whom monitoring is assigned is required to ensure that the recommendation is implemented according to a defined timescale;*
- v. A recommendation should not be abandoned unless, exceptionally, this is shown to be fully justified to the person to whom monitoring is assigned;*
- vi. Any management system to which the recommendation relates is altered to align it with the recommendation;*
- vii. The effectiveness of a recommendation is audited after its implementation;*
- viii. Full records are kept of all recommendations and their state of progress; and*
- ix. There is a system for the central tracking of recommendations which are directed at Railtrack Line, and those which, either immediately or thereafter, are directed to one or more of the Zones. Paragraph 7.106 refers*

Action on Railtrack By 20/12/2001

Action Plan

RT will establish a Recommendations Management Team, by 20 December 2001, to ensure timely delivery of formal investigation recommendations. RS will ensure the identification and development of industry-wide IT based tracking systems. The team will be visible and involve all TOCs as necessary and meet points listed in recommendations. RT (item (v)) to consider establishing a recommendations review group for exceptional items and / or where the need arises and report by 20 December 2001.

Progress Report January 2002

RT have established their Recommendations Management team and tracking systems to align with the industry-wide tracking system. RS lead the IT based tracking working group and development of industry-wide system is scheduled for delivery by 1 April 2002. RGSs were issued in December 2001 for compliance by February 2002. RT's Company Standard has been brought in line with this and issued in February 2002 for immediate implementation. LUL report that they have recently developed and implemented a safety action tracking system across LUL and the Infracos.

Status

Action completed.

Implementation of Formal Inquiry recommendations (recommendations 6 and 7)

Recommendation 7

Consideration should be given to extending sub-para (ix) of Recommendation 6 to recommendations which are directed to one or more of the TOCs and others. Paragraph 106 refers.

Action on Railtrack By 20/6/2002

Action Plan

TOCs to ensure they have arrangements / systems in place to track and implement recommendations, to include issues as in recommendation 6, by 20 December 2001. RS to lead an industry recommendations tracking working group and to propose a system for implementation by August 2001. RT, using the RS information, intend that their tracking system, as in recommendation 6 (ix), will track those recommendations directed to TOCs where risk could be imported onto Railtrack's network, by June 2002.

Progress Report January 2002

RT has a tracking system that identifies recommendations directed at TOCs. RS report that their recommendation tracking working group have proposed a SMIS upgrade to accommodate recommendation and industry action tracking. Development work has started and will be implemented by 1 April 2002. All TOCs have reported and either already have such systems or are developing such system.

Status

Action completed.

Signalling in the Paddington area (recommendations 8 - 10)

Recommendation 8

Railtrack should ensure that the risk assessments and any consequent actions required under Group Standard GK/RT 0078 in respect of the signals in the Paddington area are carried out as soon as possible. Paragraph 7.125 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to complete the risk assessment for the signals in the Paddington area and carry out any consequent actions required under RGS GI/RT7006, as soon as possible, but in any case by December 2001.

Progress Report January 2002

RT considers this recommendation has been completed as risk assessments have been undertaken. They accept that this will need to be done again under the re-signalling scheme at Paddington. GK/RT/0078 has been superseded by GI/RT7006, issued December 2000 for compliance by February 2001. This addresses overrun risk assessment for both changes to track/signalling and changes of operational use.

Status

Action completed.

Signalling in the Paddington area (recommendations 8 - 10)

Recommendation 9 Cullen central recommendation

Railtrack should conduct a safety examination of the layout over 0.2 miles from Paddington Station so as to satisfy the HMRI, if necessary by a risk assessment and additional measures, that it is safe for operation at current speeds and to current traffic arrangements. Such a safety examination should be repeated before the implementation of any change which is or may constitute, in the opinion of the HMRI, a material change of circumstances. Paragraph 7.126 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to repeat safety examination prior to next material change, expected October 2001, taking into account any associated risks on the railway. Action on RT to ensure that current procedures and arrangements are in place, to identify what may be a material change and to undertake risk assessment prior to implementation. HMRI to satisfy itself on the adequacy of the risk assessment before any changes are implemented.

Progress Report January 2002

RT is in ongoing discussion with HSE on the safety of the layout proposed by RT for the Paddington resignalling. HSE accepts the current, temporary layout is acceptably safe.

Status

Action completed.

Signalling in the Paddington area (recommendations 8 - 10)

Recommendation 10 Cullen central recommendation

No change should be made in the direction of running on line 3 or in the current speed limits on any of the lines out to two miles six chains from Paddington Station unless and until the following have been done to the satisfaction of the HMRI, namely:

- i. a risk assessment has demonstrated that the change can be implemented in safety, and, if this can be achieved only if certain measures are taken, what these measures are;*
- ii. and such measures have been implemented and shown to be effective.*

The risk assessment should take account of the following possible measures, inter alia:

- i. the conversion of four-aspect to three-aspect signals;*
- ii. the addition of flank protection at SN109 and elsewhere if appropriate;*
- iii. the installation of standard, simple, non-distracting and consistent means of line identification;*
- iv. the alteration of the height, configuration and mounting of signals; and*
- v. the installation of an additional gantry to the east of Portobello Bridge for carrying Down signals previously carried on gantry 8.*

The risk assessment should be carried out by persons independent of Railtrack and in accordance with usual standards and the best available methods. It should take account of human factors which may affect the actions of drivers and signallers, and any risks which the carrying out of any of these measures might create. Paragraphs 7.127 and 7.128 refer.

Action on Railtrack

Action Plan

RT to instruct all relevant staff, by end of September 2001, that no changes to the direction of running on line 3 or the current speed limits on any of the lines out of Paddington, can be made unless and until HMRI have formally declared they are satisfied.

Progress Report January 2002

RT is in ongoing discussion with HSE on the safety of the layout proposed by RT for the Paddington resignalling. HSE accepts the current, temporary layout is acceptably safe.

Status

Action completed.

Driver management and training (recommendations 11 to 19)

Recommendation 11

Signallers and drivers should jointly attend away days and other training processes to develop their mutual understanding. Paragraph 9.28 refers.

Action on Railtrack, TOCs By 20/6/2002

Action Plan

TOCs and FOCs will consider and discuss with relevant Zones how to establish joint training / briefing. RT and TOCs to initiate joint away days by June 2002. RT, TOCs and FOCs to decide the frequency of such events by June 2002. When such arrangements are agreed, the arrangement of and attendance at such events must be incorporated into training manuals or instructions.

Progress Report January 2002

RT's Safety Executive meeting has endorsed the recommendation, ATOC and the contractors have confirmed their support. Each Zone/Region is now leading the development of programmes in their geographical area, liaising with TOCs/FOCs and contractors. Joint training/briefing will be held to the agreed frequencies and some have already taken place; frequency is likely to be two per year.

All TOCs have reported and all report that they have held discussions with the relevant Zones. LUL report that they have completed a review to revise standards for train operators and they have been implemented on three LUL lines by November 2001. The revised standards will be introduced on the remaining lines by March 2002.

RITC report that this is part of developing a core-training package for drivers and signallers.

Status

Substantial progress, on schedule for completion by target date.

Driver management and training (recommendations 11 to 19)

Recommendation 12 Cullen central recommendation

Thames Trains should increase the frequency of the briefing of drivers with a view to ensuring that each driver has a face to face meeting with his or her driver standards manager at least monthly, if not more often, and safety should be the first item on the agenda of these meetings. Paragraph 9.29 refers.

Action Thames Trains By 20/12/2001

Action plan

TT will implement monthly, structured face-to-face, briefing for all its drivers and share initial lessons with other TOCs, by 20 December 2001. ATOC will review TT experience and submit report to HSE with proposals for how best practice for briefing drivers can be rolled-out to all other TOCs and others who operate on RT network, by June 2002.

Progress Report January 2002

ATOC members note that the implications of this recommendation on staff and supervisory resources deployment across TOCs could not be sustained without cancellation of passenger train services.

TT report that monthly briefings were introduced in October 2001. Independent assessment will take place after 6 and 12 months and TT will share this information with ATOC. All TOCs report that they have reviewed the frequency and content of driver briefings and some changes introduced. TOCs report that they are waiting to hear the results of TT project.

RITC report that this and recommendation 13 will be considered as part of the National Occupational Standards review.

Status

Action completed. May be ongoing work for other TOCs.

Recommendation 13

The adoption by TOCs of the teaching and practice of defensive driving is endorsed. Paragraph 9.39 refers.

Action on TOCs

Action Plan

TOCs to ensure that their commitment to the teaching and practice of defensive driving is detailed, and how implementation of ATOC's ACOP is taken forward, in their Safety Case.

Progress report January 2002

Defensive driving is now a subset of professional driving initiative led by RS. ATOC members will continue to train their staff in defensive driving and encourage these staff to practice the techniques.

All TOCs have reported and the overwhelming majority report that this is already company policy. Some TOCs report that defensive driving also forms part of the driver assessment process.

Status

Action continuing, further review necessary.

Driver management and training (recommendations 11 to 19)

Recommendation 14 Cullen central recommendation

TOCs should review the effectiveness of the systems in place to deliver the required level of driver competence at least once every three years, and should retest the driver against the revised systems at the same frequency. Paragraph 9.49 refers.

Action on TOCs By 20/12/2001

Action Plan

Each train operator on the RT network must review their current procedures to ensure their systems are effective in delivering driver competence.

RS will develop proposals for a study of licensing safety critical staff, by November 2001, for a research project and report in December 2001 on the scope and timetable for the project. Any proposals should include a protocol for those drivers who fail tests discussed with the relevant TUs. TOCs will review their procedures in the light of emerging conclusions from the RS work.

Progress Report January 2002

All TOCs have reported and confirm that arrangements for assessing their drivers' competence have been reviewed to ensure effectiveness and revised as necessary.

RS report that they have commissioned Halcrow to carry out an options study on driver licensing on behalf of ATOC, report due end 2001. RS suggest that ATOC should take the lead in recommendation 14 (already in the lead for recommendation 15 and 16). RS suggest that they should remain in the lead on the broader industry issue of safety critical workers generally. RS report that, in advance of receiving the results of ATOC's review, work is underway to define the content and structure of the RS research on licensing of safety critical workers generally. RS is currently defining the packages of work to be done in the area of competency, together with their associated milestones and deadlines. Results will be shared with HSE. This work will need to be reviewed in the light of Cullen 2 recommendations 24 and 25.

RITC report that the assessment documents are available on their website.

Status

Action completed but work continues.

Driver management and training (recommendations 11 to 19)

Recommendation 15

The ATOC study on the central licensing of drivers should be progressed expeditiously. Paragraph 9.50 refers.

Action on ATOC By 20/6/2002

Action plan

ATOC will review the present arrangements for driver training and, if appropriate, produce proposals for change. ATOC will publish a study with proposals for taking this forward and to include proposals for involving non-passenger TOCs, by June 2002. RS will complete study of licensing all safety critical employees, including the implications of forthcoming European legislation. ATOC's review will feed into this study.

Progress Report January 2002

ATOC have reviewed the present arrangements for driver licensing and will discuss proposals for change with RS. For RS comments see recommendation 14.

HRA report that their existing arrangements are adequate but will consider the RS report when available. RITC note that this work links to their national occupational standards.

Status

Continuing action.

Recommendation 16

ATOC should consider the application of NVQs to the driver licensing scheme presently under their consideration. Paragraph 9.52 refers.

Action on ATOC By 20/6/2002

Action Plan

ATOC to consider the application of NVQs as part of its review of driver training (see recommendation 15). RS to consider the use of NVQs in their work on safety critical staff.

Progress report January 2002

ATOC have discussed draft report and consider that qualifications of driver training and assessor should form part of the criteria for the accreditation for TOCs to issue driver licences. For RS comments see recommendation 14. RS note that the NVQ issue is covered in recommendation 15.

HRA report that they support the use of NVQs and one heritage railway has fully adopted NVQs and is advising others. RITC report that they are revising the NVQ standards and under the Framework for Skills projects the NVQ pilot is being evaluated.

Status

Continuing action.

Driver management and training (recommendations 11 to 19)

Recommendation 17

The development of a culture within the industry in which information is communicated without fear of recrimination, and blame is attached only where this is justified, is commended. Paragraph 9.60 refers.

Action on Railway Group members

Action Plan

RS plans to consult on a draft strategy from December 2001 and make clear what resources are available. RS and Railway Group members will take this into account when developing their 2002/03 company safety plans. RS will validate that appropriate actions have been identified and adopted. RS to review progress and report to HSE by June 2003. RS will develop a research theme strategy for safety culture by December 2001.

Progress Report January 2002

RT has created a new post 'Head of Safety Leadership' reporting to a Board level Director. The remit is to develop safety culture and leadership within the industry, building on much of the work done following the DuPont report.

RS report that they have received the final report from AD Little, and will brief all those who took part in the stakeholders' interviews and those members of the NSTF who did not take part. The NSTF will review a detailed implementation strategy in March 2002. The Railway Group has agreed to a significant strengthening of the 2002/03 Railway Group Safety Plan in respect of an intolerance of unsafe decisions, conditions and acts: workforce safety objective is now 'zero fatalities'. RS have finalised the software tool to support the application of the good practice guide to competence in strategic management; they have also reprinted the good practice guides on safety tours. RS have agreed in principle to support the development, piloting and evaluation of a 'hearts and minds' management development module. RS will also work to prepare for further research proposed by industry through RSRP.

All TOCs report positive action, including membership of the CIRAS reporting system. Some TOCs report that they have completed culture surveys with more planned.

Status

Continuing action.

Driver management and training (recommendations 11 to 19)

Recommendation 18

Thames Trains and other TOCs should ensure that their driver training and testing programmes adequately reflect the need for specific, relevant and validated criteria. Drivers should be tested against these criteria, and a definite pass standard should be established. Consideration should be given as to how often drivers should repeat key steps in their training before submitting themselves for testing. Paragraph 9.64 refers.

Action on Thames Trains, TOCs By 20/6/2002

Action Plan

RS to ensure that Standards properly include provision for driver training revision and need for criteria. Links with National Occupational Standards. TT will develop a pass standard for each element of the driver training programme and will specify the frequency for how often trainee drivers should repeat key steps before final assessment. All TOCs to ensure their Safety Case contains commitments for their driver training and testing programmes to include specific, relevant and validated criteria, by 20 June 2002.

Progress Report January 2002

RS report that GO/R3251 and GO/RC3551 went out for consultation in July/August 2001 and are scheduled for issue in April 2002 for compliance by June 2002.

TT report that they have developed frequencies for repeating key steps during training. TT requirements are prescribed within company procedure. Changes are required to the monitoring and continuing assessment documentation for trainee drivers, they aim to have this work completed by April 2002.

RITC report that the RGS are linked to the National Occupational Standards.

All TOCs have reported that they are reviewing their driver training packages and some TOCs have revised their Safety Case to incorporate greater detail about driver training and testing procedures. Some TOCs report that they will use external validation of their procedures.

Status

Continuing action.

Driver management and training (recommendations 11 to 19)

Recommendation 19

Further research should be carried out to develop the understanding of human factors as they relate to train driving. Paragraph 9.66 refers.

Action on Railway Safety, TOCs

Action Plan

RS to publish strategy for human factors research, in consultation with Railway Group members and HSE by February 2002 and report annual progress to HSE. The strategy to include practical proposals on applying findings and results within the industry.

Progress Report January 2002

RS report that a variety of research is underway or has been completed, for example version 2 of the human factors CD-ROM catalogue of railway related research has been widely distributed and version 3 is underway. On human factors guidance and training, GK/RT0037, positioning of signals, was issued in October 2001 for compliance by December 2001 and GI/RT7006, prevention and mitigation of overruns, risk assessment, was issued in December 2000 for compliance by February 2001. A training needs analysis has been performed involving all Railway Group Members and was published in December 2000, and work is ongoing. All these issues are now part of the Railway Safety Research Programme.

RITC report that potential issues are raised via the Framework for Skills discussions.

Status

Continuing action.

Safety Auditing (recommendations 20 and 21)

Recommendation 20

The safety audit process should be strengthened, and the quality of communication during the process should be improved. Paragraph 9.44 refers.

Action on Railway Safety, Railtrack, TOCs By 20/12/2001

Action Plan

RS to report to HSE by 20 December 2001, how the safety audit process could be improved, taking into account the totality of audits within the industry. In particular, RS to review the adequacy of the current system to see if it can be further improved beyond those improvements already in place, especially for good communication. To make proposals for improvements within industry, by 20 December 2001. HSE to clarify the wording 'strengthen' and 'improve' by December 20 2001.

Progress Report January 2002

RT issued the Company Audit Manual in August 2001 and will review it early in 2002. A five-day rail specific Lead Auditor training course has been developed. 240 RT Auditors and 28 RT Lead Auditors have been trained to date. The review of auditor performance started in December 2001.

RS report that HMRI and RT started discussions on a draft paper in September 2001. The final draft will be circulated to the industry consultation group for agreement. This may need to be considered in the light of Cullen 2 recommendations on audit. HSE to provide clarification of 'strengthen' and 'improve' by end of March 2002.

LUL report that their safety improvement programme in the Safety Case includes actions to review, and where necessary strengthen the overall safety audit process.

All TOCs have reported, with many reporting that they have reviewed their processes and procedures.

Status

Action substantially complete, some further work is underway, for completion by March 2002.

Safety Auditing (recommendations 20 and 21)

Recommendation 21

An organisation the activities of which are being audited should disclose all material and relevant information to the auditor in regard to the area of the activity which is being audited. Paragraph 9.46 refers.

Action on Railtrack, TOCs By 20/12/2001

Action Plan

RT and all train operators using their infrastructure will instruct managers to disclose all relevant material, from December 2001. RS should consider this in their review, see recommendation 20, and should ensure audit procedures make this point.

Progress Report January 2002

RT issued the Company Audit Manual in August 2001 and will review it early in 2002. Audit protocols are produced as a matter of course and remits are developed in conjunction with the sponsor(s) of the audit.

RS report that, although this action is directed to RT and TOCs, they now include two requests for the disclosure of any issues that the auditee believes should be subject to examination during the audit. RS report that the requirement for disclosure by auditees will be considered in the consultation discussed in recommendation 20.

All TOCs report that this is their current policy, and some TOCs have stated that managers will be reminded.

Status

Action completed but continuing work.

Recommendation 22 Cullen central recommendation

The standard on signal sighting should require that explicit consideration is to be given to the readability of a signal. It should be made clear that the fact that a signal complies with a minimum requirement is not of itself to be taken as meaning that it is adequate. Paragraph 11.13 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS will publish Issue 4 of the standard in October 2001, to action this recommendation.

Progress Report January 2002

RS report that GK/RT0037 issue 4 was issued in October for compliance by December 2001.

LUL report that new operational and engineering standards for signal sighting are almost complete. LUL plan to have one signal sighting committee per line. These standards will be reviewed in the light of experience from the National Rail experience.

RITC report that this will be included in National Occupational Standards for relevant staff.

Status

Action completed.

Signal sighting (recommendations 22 to 32)

Recommendation 23 Cullen central recommendation

The standard on signal sighting should deal explicitly with the additional time required for the reading of certain signals, including (but not necessarily limited to) those mounted on gantries. Paragraph 11.13 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS will publish Issue 4 of the standard in October 2001, to action this recommendation.

Progress Report January 2002

RS report that GK/RT0037 issue 4 was issued in October for compliance by December 2001.

Status

Action completed.

Recommendation 24 Cullen central recommendation

Human factors experts should be involved in the revision of the standard on signal sighting. Paragraph 11.13 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS will publish Issue 4 of the standard in October 2001, to action this recommendation.

Progress Report January 2002

RS report that GK/RT0037 issue 4 was issued in October for compliance by December 2001.

Status

Action completed.

Signal sighting (recommendations 22 to 32)

Recommendation 25 Cullen central recommendation

The reference to "very short duration" in the standard on signal sighting should be clarified (paragraph 11.14).

Action on Railway Safety By 20/12/2001

Action Plan

RS will publish Issue 4 of the standard in October 2001, to action this recommendation.

Progress Report January 2002

RS report that GK/RT0037 issue 4 was issued in October for compliance by December 2001.

Status

Action completed.

Recommendation 26 Cullen central recommendation

Areas where ambiguity in the meaning of "very short duration" may have caused, or may still cause, problems should be identified. There should be a retrospective review of all locations where this may be the case, so that appropriate action may be taken. Paragraph 11.14 refers.

Action on Railtrack By 20/06/2002

Action Plan

RT will develop a company standard by February 2002. RT will undertake a retrospective review of signals and develop a programme to rectify those signals not meeting the standard; work to be completed by September 2002. RT will report progress on 20 June 2002.

Progress Report January 2002

Industry and HSE accept that the timescale is not practical as this recommendation links to recommendation 28, which must be completed first. GK/RT0037 was issued in October 2001 for compliance by December 2001. RT issued Company Standard for signal sighting in February 2002. Signal Sighting guidelines will be reviewed and if appropriate a modified Company Standard will be issued in June 2002. A signal instruction notice was issued in February 2002 for Zones/Regions to retrospectively review signal obstruction and to prepare appropriate action plans: this will take 15 months to complete, ie April 2003 as this programme involves a review of a large number of locations.

Status

Action continuing, for completion by April 2003.

Signal sighting (recommendations 22 to 32)

Recommendation 27 Cullen central recommendation

The expression "overhead line equipment" in the Group Standard on signal sighting should be clarified by the statement that it refers only to wires and droppers. Paragraph 11.16 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS to amend the Standard, if necessary and after discussion with HSE, concerning those parts of equipment which can be classified as 'wires and droppers' by 20 December 2001.

Progress Report January 2002

RS report that GK/RT0037 issue 4 was issued in October for compliance by December 2001. RS and HSE are discussing issues on Appendix 3 of GK/RT0037 with a view to reaching early agreement on any further changes.

Status

Action complete, with some continuing work.

Recommendation 28 Cullen central recommendation

The standard on signal sighting should define acceptable limits to the temporary obscuration of a signal, subject to the overriding right of a signal sighting committee to determine whether the nature and extent of the interruption in the individual case is such that the sighting is unacceptable. Paragraph 11.16 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS to amend the signal sighting RGS, using the rapid response procedure, by 20 December 2001.

Progress Report January 2002

RS report that GK/RT0037 issue 4 was issued in October for compliance by December 2001.

Status

Action completed.

Signal sighting (recommendations 22 to 32)

Recommendation 29 Cullen central recommendation

The standard on signal sighting should explicitly define the cab sight lines within which signals must be positioned by reference to the envelope governing the position of the driver's eye which is specified for each particular rolling stock. Paragraph 11.17 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS to amend existing RGS, insofar as possible to fastest timetable using outside resource if necessary, but in any case by March 2002.

Progress Report January 2002

RS report that GK/RT0037 issue 4 and GE/RT8084 were issued in October for compliance by December 2001. RS report that the review of GM/RT2161, cab sight lines, does not meet the rapid response criteria and propose that the work should be extended to June 2002. Timescale would only be achievable through rapid response delivery of the standards process but RS reluctant to shorten consultation period for a key interface standard. HSE accepts this timescale. There are two separate RGSs covering existing trains and new trains - both need to be reviewed to ensure compatibility.

Status

Action continuing, for completion by June 2002.

Recommendation 30

The report by W S Atkins "Initial Study of Signal Sighting Practice on Railtrack Infrastructure", Issue 1, 6 March 2000, is commended. Paragraph 11.19 refers.

Action Plan

RS to incorporate the information in the WS Atkins study in a revised RGS (see recommendation 28), by March 2002.

Progress Report January 2002

Recommendation accepted by all parties. RS report that GK/RT0037 issue 4 and GE/RT8084 were issued in October for compliance by December 2001.

Status

Action completed.

Signal sighting (recommendations 22 to 32)

Recommendation 31

Railtrack, in consultation with the TOCs, should examine the availability of signal sighters to meet the expected workload and take all necessary steps to ensure that there is an adequate supply of trained signal sighters and an adequate range of skills. Paragraph 11.20 refers.

Action on Railtrack, TOCs By 20/6/2002

Action Plan

RT to issue a Signal Sighting Competence Standard, along with a training pack by 31 March 2002. RT and TOCs to ensure adequate numbers of fully competent staff are in place by June 2002.

Progress Report January 2002

RT reports that the signal sighting competence Standard should be ready for stakeholder review in January 2002. Work on the training pack is scheduled to start in January 2002 with the aim of developing trainer accreditation and using Sentinel as a means of capturing and recording relevant competences.

RITC report that the RGS will be included in the National Occupational Standards and linked with the training package when produced.

All TOCs have reported, and where necessary further staff have been, or will be, trained. Some TOCs report they are waiting for course details from RT before starting a training programme.

Status

Action continuing.

Recommendation 32

It should form part of Railtrack's safety management system that it is the responsibility of senior Zone operating and signal engineering management to decide whether the recommendations of a signal sighting committee under the Group Standard on SPADs are to be implemented and, if not, what alternative measures are to be taken, and, in either event, that the relevant measures are implemented. Paragraph 11.22 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to make commitment to meet this recommendation in its Safety Case, supplemented by details in its SMIS, by 20 December 2001.

Progress Report January 2002

RT reports that the Company Standard on SPAD management is being reviewed and issued to Zones before publication in April 2002. The changes will formalise the handling of signal sighting recommendations. A comprehensive review of Zone processes is underway with five out of seven Zones already completed. Each Zone has processes in place that will satisfy this recommendation and the Company Standard will make these arrangements consistent.

RS note that GK/RT0037, issue 4, will require a sighting committee for new/modified signals to endorse the final arrangement for a signal. In other words, RT managers cannot override the sighting committee recommendations; they must go back to the committee and resolve any difference to the mutual satisfaction of both parties.

Status

Action continuing.

SPAD investigation (recommendations 33 to 35)

Recommendation 33 Cullen central recommendation

The Group Standard on SPADs and its associated documentation should be reviewed to ensure that there is no presumption that driver error is the sole or principal cause, or that any part played by the infrastructure is only a contributory factor. Paragraph 11.27 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS to review and propose any necessary actions to HSE by December 2001.

Progress Report January 2002

RS has committed support from the Safety Advisory Board and the National SPAD focus group for the abolition of the term 'disregard' and the use of the lower level causal factors, which is already RS practice. RS wrote to all Railway Group members in November advising them of the position. RS in the process of revising RGS GO/RT3252 which covers recommendations 33, 34 and 35. RS report that the recommended timescale is unachievable unless dealt with under the 'rapid response' procedure, which they believe is not appropriate in this case. HSE has accepted the revised timescale of October 2002. Guidance notes GO/GN3552A/B/C are being updated and will be issued before the RGS.

LUL report that they have introduced a new standard that aims to ensure that SPAD management does not lead to increased or new risks following SPAD incidents and will apply a consistent approach to incident investigation. Work is underway to ensure investigators are competent in root cause analysis and human factors.

Status

Action continuing, for completion by October 2002.

Recommendation 34 Cullen central recommendation

The use of the word "disregard" in the Group Standard on SPADs and its associated documentation should be reconsidered. Paragraph 11.29 refers.

Action on Railway Safety By 20/12/2001

Action Plan

RS will conduct a review and make proposals if appropriate, looking for possible alternative terminology. RS to report to HSE by 20 December 2001.

Progress Report January 2002

See RS comments for recommendation 33.

Status

Action continuing, for completion by October 2002.

SPAD investigation (recommendations 33 to 35)

Recommendation 35

Persons who investigate, and make recommendations as a consequence of, SPADs should be trained in the identification of human factors and in root cause analysis. Their competence in these areas should be formally recorded, and renewed by refresher courses. The analysis of SPAD data should be specifically directed to eliciting the part played by human factors and assessing the significance of the hazards against which the signals which have been passed at Danger were intended to afford protection. Paragraph 11.31 refers.

Action on Railtrack, TOCs By 20/6/2002

Action Plan

All RT and TOC staff who investigate SPADs to be competent in the identification of human factors and root cause analysis. RT and TOC's investigations of SPADs to include details of human factors and root cause analysis, with immediate effect. RS review reports to ensure adequate analysis.

RT to lead on developing root cause analysis and RS to lead on human factors standard development, to be completed by March 2002. This work will lead to a new RGS, by 20 June 2002. RT to complete review of what additional actions are required, by March 2002. Once appropriate training is agreed, all staff undertaking SPAD investigation should be trained and their competence formally assessed, by June 2002. Records of competence should be maintained and refresher training at specific intervals, such intervals to be decided by RT by March 2002. HSE will expect refresher training to take place at least every two years.

Progress Report January 2002

RT has already trained over 200 staff on formal root cause analysis training. Lessons from the workshop are currently being evaluated and the next stage is the development of a programme across RT to train on human factor skills. Continuing refresher training is under consideration. All TOCs report that the relevant staff have been, or are being, trained and some TOCs have a programme of refresher training.

RS report that the review of GO/RT3252 to incorporate human factors is underway but warn that the issue date of June 2002 is ambitious. It is more likely to be issued in October 2002.

RITC report that their driver manager's workbook is available for use.

Status

Action continuing.

Signallers' instructions (recommendations 36 to 38)

Recommendation 36 Cullen central recommendation

The instructions for signallers as to their response to a SPAD should be:

a) clarified; and

b) set out in a single set of instructions, while if there are matters which are specific to a particular area they should be covered by separate local instructions. Paragraph 12.9 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to publish revised rules/instructions for signallers by December 2001. RT should keep RS informed so that RS can review the adequacy of RGS, by December 2001 and report to HSE.

Progress Report January 2002

RT reports that the instructions were comprehensively reviewed by the industry, with large input from RT, and were implemented on 1 December 2001. They include details of the administrative arrangements for dealing with a train movement made without authority (including a SPAD) and applies to all locations and about stopping a train movement which is proceeding without authority (including SPAD) and protecting other movements

RS consider no action is necessary in relation to the RGS at present.

LUL report that their Safety Improvement Programme focuses on competence assurance, including service control operation. RITC report that they are reviewing the relevant National Occupational Standards for recommendations 36 to 40.

Status

Action completed.

Recommendation 37 Cullen central recommendation

The instructions for signallers should state explicitly that the signaller is expected, in the event of a SPAD, to make an assessment and to take action immediately. Paragraph 12.10 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to publish revised rules/instructions for signallers by December 2001. RT should keep RS informed so that RS can review the adequacy of RGS, by December 2001 and report to HSE.

Progress Report January 2002

RT reports that the instructions were comprehensively reviewed by the industry, with large input from RT, and were implemented on 1 December 2001.

RITC rewriting level 2 National Occupational Standards with support from RT.

Status

Action completed.

Signallers' instructions (recommendations 36 to 38)

Recommendation 38 Cullen central recommendation

The instructions for signallers should provide a set of options, including the use of the CSR (where it is available) either to send an emergency stop message to a particular train or a general stop message. This range of options should be supported by full and regularly repeated briefing as to the type of circumstances in which each option is or may be appropriate. Paragraph 12.11 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to publish revised rules/instructions for signallers by December 2001. RT should keep RS informed so that RS can review the adequacy of RGS, by December 2001 and report to HSE.

Progress Report January 2002

RT reports that SGI 47 and Reg 6 were comprehensively reviewed by the industry, with large input from RT, and were implemented on 1 December 2001.

Status

Action completed.

Recommendation 39

Railtrack should institute a system whereby all signallers in the signal box (or centre) are briefed by their line manager following a SPAD in their area, and there is appropriate dissemination of information which may be of assistance to signallers elsewhere. Paragraph 12.13 refers.

Action on Railtrack By 20/12/01

Action Plan

RT to include a commitment in the Safety Case and instruct staff accordingly, by 20 December 2001.

Progress Report January 2002

RT reports that their Operations Management Group has been briefed on the requirements of this recommendation. A template SPAD brief/notice has been developed, together with categorisation, severity ratings and thresholds which define when details of SPADs must be shared with other signallers. Work was completed in December 2001.

Status

Action completed.

Signallers' training and briefing (recommendations 39 to 42)

Recommendation 40

Railtrack should ensure that the reports which are made to the Zone about a SPAD should include a report by the signaller as to the actions taken by him or her and the reasons for such actions. Paragraph 12.13 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to ensure SPAD reports includes a report from the signaller, with immediate effect. RT to review the existing Standards to clarify the role of the signaller in reporting, by 20 December 2001.

Progress Report January 2002

RT reports that the Company Standard on SPAD managements is under review to include the specific information that must be obtained from signallers as part of the SPAD investigation process. A supplementary guidance note to all the Zones was issued early in January 2002 and the revised standard will be issued in April 2002 on CD ROM.

Status

Substantially complete, due by April 2002.

Recommendation 41

The use of simulators in providing fully effective training of signallers in dealing with emergencies is endorsed. Paragraph 12.15.

Action on Railtrack By 20/6/2003

Action Plan

RT to develop a strategy and implementation plan for signalling simulators by June 2002

Progress Report January 2002

RT report they have begun training needs analysis to consider how best simulation can be used for initial and subsequent training of signallers. Will include links with train driving simulators so that drivers and signallers can jointly be trained.

Status

Action continuing.

Signallers' training and (briefing recommendations 39 to 42)

Recommendation 42

Railtrack and the TOCs should take steps to ensure that signallers and drivers obtain a full appreciation of the nature and demands of each other's work. Paragraph 12.16 refers.

Action on Railtrack By 20/6/2002

Action Plan

See Recommendation 11

Progress Report January 2002

See recommendation 11.

All TOCs have reported, see recommendation 11 for comments.

Status

Action continuing.

Recommendation 43 Cullen central recommendation

Railtrack should review the work done by signallers to identify all non-essential tasks and eliminate them from the work which is performed by them while they are in charge of a workstation. Paragraph 12.17 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to complete review and make changes as necessary, by 20 December 2001. RT to complete ergonomic changes by June 2002.

Progress Report January 2002

RT have almost finalised a process for use by the Zones, with necessary ergonomic support. RS will support with relevant processes. RT report that work is continued on schedule with the involvement of human factor specialists in the key stages.

Status

Substantially complete, due June 2002.

Signallers' working conditions recommendations 43 to 46

Recommendation 44

A supervisor should be employed on a continual basis to ensure that the workstations are operated in the most effective way. Paragraph 12.17 refers.

Action on Railtrack By 20/6/2002

Action Plan

RT to evaluate situation at Slough IECC by December 2001 and implement the most effective way forward for the rest of the network by June 2002.

Progress Report January 2002

RT has commissioned an independent human factors specialist to do a risk assessment of human factors specific issues at Slough IECC. This will include the workload of signallers, workstation ergonomics and interface management. RT has reviewed the report for Slough and will appoint supervisors; advertising began in February 2002. RT will later determine the company policy regarding the provision of supervisors in other signalling locations across the network.

Status

Action continuing.

Recommendation 45

Signallers should take the opportunity from time to time to practise the controlling of train movements. Paragraph 12.18 refers.

Action on Railtrack By 20/6/2002

Action Plan

The signallers should be in a position to demonstrate that they have experience of manually controlling trains, by 20 June 2002.

Progress Report January 2002

RT has developed performance criteria that has been added to the signallers competence assessment. RT has issued briefing notes to all Zone competency managers. Zones are now implementing the performance criteria where necessary.

Status

Action continuing.

Signallers' working conditions recommendations 43 to 46

Recommendation 46

Railtrack management should set out the criteria for allowing signallers, in exceptional circumstances, to exceed the maximum of 72 hours of work per week, and ensure that these criteria are, and continue to be, correctly applied. Paragraph 12.19 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to review and report to HSE, by 20 December 2001. HSE will consider the wider implications and report to HSC, February/ March 2002 with recommendations.

Progress Report January 2002

RT Guidance on managing Safety Critical Working Time Exceedances is not limited to signalling personnel, and the review will consider the recommendation for other safety critical staff. RT report that they are currently evaluating their systems for managing fatigue to identify the nature and frequency of exceedances and the systems for approving them.

RT is amending the company standard to give additional guidance about exceedance, to be issued by April 2002. RT has issued clarification on the definition of exceedances. Work is underway to review the 36-hour rosters, using HSE's fatigue index and assessing whether such a tool can be integrated into RT's fatigue management arrangements.

HSE in conjunction with DTI and DTLR is developing proposals on implementing the extension of the Working Time Directive to the railway sector. DTI plans public consultation in autumn 2002. HSE report to HSC delayed until RT report received.

Status

Action continuing.

IECC equipment (recommendations 47 and 48)

Recommendation 47 Cullen central recommendation

There should be a unique alarm for SPADs, which should sound until it is turned off. Paragraph 12.21 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to implement the IECC upgrade 03 (with the unique SPAD alarm) for pilot operation at Slough by August 2002. As that timescale cannot be shortened, further development work for a simpler alarm system is being pursued with earlier implementation. RT to report progress by 20 December 2001.

Progress Report January 2002

RT report that the IECC upgrade pilot operation was fitted at Slough in August 2001. The upgrade will be rolled out to all other IECC by end of April 2002. Commissioning work of the PC based SPAD monitoring system at Slough was done early January 2002 and new software installed on the workstations early January 2002. The specification for the signaller interface has taken account of human factors and work with signallers to agree an acceptable solution. Suppliers of other non-IECC systems have been advised to develop SPAD alarms for their systems. No specific solutions have yet been made.

Status

Action continues for the IECC upgrade. Further work needed for non-IECC systems.

IECC equipment (recommendations 47 and 48)

Recommendation 48 Cullen central recommendation

The speed with which signallers can take action to move points in an emergency should be improved.

Paragraph 12.22 refers.

Action on Railtrack By 20/6/2002

Action Plan

RT will consider the human factors associated with automatically reconfiguring displays in the event of an incident and will consider whether requirements should be included in GK/RT0025 relating to the speed with which signalling system information can be accessed / displayed in an emergency. RT will take action to improve speed of response, by 20 June 2002.

Progress Report January 2002

RT report that a human factors study into the implications of this recommendation has started and should be complete early in 2002. The specification requirements for the technical feasibility study will then be produced and let. RS report that GK/RT0025 is currently under review and will be issued in August 2002.

Status

Action continuing.

Automatic controls (recommendations 49 and 50)

Recommendation 49

There should be a study of the possibility of the automatic replacement of a signal to Danger where a SPAD has occurred and the layout is such that there is a significant danger of collision. Paragraph 12.27 refers.

Action on Railtrack By 20/6/2003

Action Plan

RT to study the possibility of an automatic replacement of a signal to danger and report to HSE by 20 June 2003.

Progress Report January 2002

This is covered by RGS GK/RT/0064 "Provision of overlaps, flank protection, and trapping" which mandates the process for the identification of SPAD mitigation measures, including flank protection. RT report that guidelines are being formulated for scheme design, including the use of risk assessments when appropriate. RT intend that these guidelines should be available very soon. The corporate standard for scheme design should be prepared and issued by mid 2002.

Status

Action continuing.

Automatic controls (recommendations 49 and 50)

Recommendation 50

Subject to satisfactory risk assessment, an arrangement should be made whereby, when a train which is fitted with the CSR passes a signal at Danger, an audible warning automatically sounds in the cab. Paragraph 12.28 refers.

Action on Railtrack By 20/6/2003

Action Plan

RT to complete the technical feasibility of this, by 20 June 2003.

Progress Report January 2002

Industry raised several issues:

- 1) The concept of using CSR system to transmit an emergency stop duplicates TPWS: hard to see any added value.
- 2) Need to establish compatibility before modifying existing train describers to identify SPADs and which train has SPADed.
- 3) Study the practicability of re-programming CSR so that a message over the TD interface showing that a specific train has SPADed, an emergency stop message is broadcast to that train. CSR systems have a limited life (RT have to hand back the CSR frequencies by 2005) and the cost benefit of doing this work now needs to be evaluated carefully.
- 4) Consideration of the likelihood and risks associated with this and the possible ways that it could fail because the SPAD was not detected late or falsely detected.

RT report that there has been a meeting between the Head of Signalling and the Head of Telecommunications to determine the feasibility of the recommendation; further detailed work is being undertaken with the aim of reaching an agreed view by the end of February 2002. One TOC suggested that the principle needs to be extended to the GSM-R system.

Status

Action continuing.

Radio Communication (recommendation 51)

Recommendation 51 Cullen central recommendation

There should be a national system of direct radio communication between trains and signallers. Paragraph 12.29 refers.

Action on Railtrack, TOCs By 20/6/2003

Action Plan

RT, working with ATOC, to provide a detailed plan to HSE by March 2002, with earliest possible fitment date.

Progress Report January 2002

RT believes that this recommendation can be best delivered by the national fitment of the European mandated (and ORR funded for GSM-R voice) of GSM-R radio system. RT report that the design and development phase was completed in November 2001. Approximately 2000 sites will need to be constructed and authority has been given to consult with local authorities on the siting of the radio base stations and the preparation of the tender specifications to procure the GSM-R system and mobiles.

ATOC consider that the necessity to bridge and then coordinate the GSM-R and ERTMS programmes has been achieved. The interim ERTMS Report recommends that voice and data channels to accommodate ERTMS Level 2 be incorporated into the specification for ERTMS on the TENs lines and the Midland Main Line.

RS report that they have received a proposal for the production of a RGS on GSM-R links, timescales for production of standard to be advised.

LUL report that they will monitor national rail developments in relation to their operation on RT controlled infrastructure.

Status

Action continuing.

Preservation of data (recommendation 52)

Recommendation 52

Signallers, managers and maintenance staff working at IECCs should be instructed as to the need to preserve CSR data disks in the event of a SPAD taking place. Paragraph 12.30 refers.

Action on Railtrack By 20/12/2001

Action Plan

RT to ensure that instructions in the event of an accident cover this, by 20 December 2001.

Progress Report January 2002

RT report that an instruction to operations managers was issued in October 2001.

RS report that GO/RT3434/1, accident and emergency planning, will be replaced by GO/RT3471, accident and emergency response planning and guidance note GO/GN3671. RS report that these will be issued in April 2002.

Status

Action substantially completed, due by April 2002.

Crashworthiness (Recommendations 53 to 60)

Recommendation 53 Cullen central recommendation

The enhancement of the cabs on HSTs to improve driver protection along with energy absorption and compatibility with other vehicles, and the enhancement of measures for the retention of bogies on the coaches of HSTs, should be considered, subject to an assessment of feasibility, costs and benefits, with a view to possible retro-fitting. Paragraph 13.4 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

ROSCOs to provide detailed report to HSE, by June 2002. All parties involved in the work to implement these recommendations to take steps to alert each other of emerging issues. Although this was recommended in the Formal Inquiry report and at that time was found to be impracticable and not cost effective. Angel Trains will revisit enhanced measures for bogie retention, taking note of other more recent incidents and report to HSE by June 2002.

Progress Report January 2002

Porterbrook will lead for ROSCOs on HST and Angel Trains will lead for ROSCOs on bogie retention issue. Angel Trains report that an engineering proposal has been developed to review bogie retention but issues arising from the Great Heck derailment need to be considered before a final decision is made. ATOC members are seeking clarification from HSE on the criteria against which the cost benefit analysis should be conducted. Technical investigation followed by cost benefit analysis is progressing on schedule to report before June 2002.

On bogie retention ATOC report that for Mk 3 vehicles a keep plate is recommended to provide vertical retention, a common (BR InterCity) design is viable. ATOC report that analysis carried out indicates that the longitudinal strength of the bogie attachment meets current RGS design requirements and further enhancement is unlikely to be practical. HSE will need to consider any case made on this issue.

LUL report that although the collision risk is significantly lower, they are developing a Standard that reflects current LUL best practice.

Status

Action continuing. This recommendation needs to be completed before other related recommendations.

Crashworthiness (Recommendations 53 to 60)

Recommendation 54 Cullen central recommendation

The current standard for crashworthiness in respect of new vehicles should be reviewed in the light of the crash at Ladbroke Grove with respect to the objectives referred to in Recommendation 53. Paragraph 13.4 refers.

Action on Railway Safety By 20/6/2002

Action Plan

RS to report in December 2001 on the programme to meet this recommendation following publication of its research strategy.

Progress Report January 2002

ATOC suggest that the scope of recommendations 54, 56 and 58 be extended to include the implications of retrospective application of any improved crashworthy standards. ATOC report that assessment is progressing well.

RS report that some research is underway but the full picture, in terms of what the research should cover and the timescales, will be available when the research theme strategy for this theme is published. An initial draft theme strategy for "Accident Survivability, including Vehicle Integrity and Fire" has been produced. This (together with other contributions /ideas for research) is now being reviewed by Railway Safety experts with a view to defining a package of research work that can be taken forward during the next few months. Review of the RGS is likely to be on a longer timescale (as other action such as recommendation 53 need to be completed first).

Status

Action continuing.

Crashworthiness (Recommendations 53 to 60)

Recommendation 55 Cullen central recommendation

In the case of Turbos, the enhancement of end pillar weld connections, the possible enhancement of crashworthiness by weakening the ends and strengthening the saloon of the cars, and the fitting of shear-out couplers and anti-overriding devices should be considered, subject to an assessment of feasibility, costs and benefits, with a view to possible retro-fitting. Paragraph 13.5 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

Angel Trains to report to HSE by 20 June 2002.

Progress Report January 2002

Angel Trains report that they are working with WS Atkins. The review will also take account of the earlier work done on the similar class 465 fleet and a cost benefit analysis will be done. The review is in its early stages but final report will be available by June 2002. ATOC report that assessment is progressing well. The ATOC Engineering Council will consider if there is any necessity for the industry to revise this Railway Group Standard; performance achieved on new rolling stock go beyond the standard set.

Note: the recommendation applies to Classes 165, 166 and possibly 465 and 466, which have similar body construction. A further study will be done to assess these issues and should be complete within the timescale.

Status

Action continuing.

Recommendation 56 Cullen central recommendation

The current standard for crashworthiness should be reviewed, in the light of the crash at Ladbroke Grove, in order to ensure that there are adequate measures for safeguarding survival space. Paragraph 13.5 refers.

Action on Railway Safety By 20/6/2002

Action Plan

RS to report in December 2001 on the programme to meet this recommendation following publication of its research theme strategy.

Progress Report January 2002

Retrospective action may be problematic for older vehicles taking account of costs and the residual life of the unit. ROSCOs will need to work with manufacturers.

RS report that some research is underway but the full picture, in terms of what the research should cover and the timescales, will be available when the research theme strategy for this theme is published. An initial draft theme strategy for "Accident Survivability including Vehicle Integrity and Fire" has been produced. This (together with other contributions/ideas for research) is now being reviewed by RS experts with a view to defining a package of research work that can be undertaken forward during the next few months.

Status

Action continuing.

Crashworthiness (Recommendations 53 to 60)

Recommendation 57

In the case of new vehicles constructed of aluminium, consideration should be given to:

- i. the use of alternatives to fusion welding;*
- ii. the use of improved grades of aluminium which are less susceptible to fusion weld weakening; and*
- iii. the further development of analytical techniques. Paragraph 13.9 refers.*

Action on ROSCOs, Manufacturers By 20/6/2003

Action Plan

Bombardier to report to HSE by 20 June 2002

Progress Report January 2002

Industry has agreed that Bombardier, for the manufacturers, will take the lead. Bombardier reports that they have arranged a meeting with all the ROSCOs and relevant industry specialists to discuss alternative methods and the way forward.

Status

Action continuing.

Recommendation 58 Cullen central recommendation

The revision of the Group Standard for crashworthiness should be pursued with particular reference to:

- i. the design requirements for more realistic scenarios;*
- ii. high speed accidents; and*
- iii. dynamic verification testing. Paragraph 13.17 refers.*

Action on Railway Safety By 20/6/2002

Action Plan

RS to report in December 2001 on the programme to meet this recommendation following publication of its research theme strategy.

Progress Report January 2002

RS report that some research is underway but the full picture, in terms of what the research should cover and the timescales, will be available when the research theme strategy for this theme is published. An initial draft theme strategy has been produced and is being reviewed with a view to defining a package of research work to be taken forward during the next few months.

Status

Action continuing.

Crashworthiness (Recommendations 53 to 60)

Recommendation 59

The enhancement of the security of seating in Turbos and of tables in HSTs should be considered, subject to an assessment of feasibility, costs and benefits, with a view to possible retro-fitting. Paragraph 13.19 refers.

Action on TOCs, ROSCOs By 20/12/2001

Action Plan

Angel Trains and Porterbrook will consider enhanced security and report to HSE by June 2002.

Progress Report January 2002

Angel Trains for ROSCOs will take the lead on seating and Porterbrook will lead on tables. Angel Trains report that there has been a slight delay in getting this work underway as there were problems in gaining access to seats from the damaged vehicles. This has now been resolved and a report will be available by June 2002. The work on reviewing the strength of HST tables by Porterbrook is using experience gained with the upgrades carried out as part of the refurbishment of the Midland Mainline HST vehicles a couple of years ago. Porterbrook report that they have let a contract to review enhancing security of tables in HSTs. ATOC report that assessment is progressing well. Common domain design improvements are available for HST tables and were implemented on West Coast and Midland Mainline Mk 3 vehicles. Dynamic testing and assessment of class 165 seat design is planned. This will consider injury risk related to failure mode and energy absorption.

Status

Action continuing.

Recommendation 60

Comprehensive market research in regard to safety related measures should be carried out in order to take account of the views of informed passenger. Paragraph 13.20 refers.

Action on TOCs By 20/6/2002

Action Plan

RS to commission and fund appropriate market research, taking account of the work done by ATOC and the views of RPC. Report to HSE by 20 June 2002.

Progress Report January 2002

ATOC report that they have considered this recommendation and will now make a market research proposal to RS. Representatives of ATOC Operations Council and RPC are to meet to ensure the views of RPC are understood. RS will be involved in order to determine the scope and form of what is required. RS are committed to fund the work once the remit is clear. RS aim to carry out this initial consultation and definition phase by March 2002.

All TOCs have reported, with most waiting for the results of the RS study but some have started work.

Status

Action continuing.

Fire mitigation (Recommendation 61)

Recommendation 61 Cullen central recommendation

The following measures should be considered with a view to enhancing protection against fire:

- i. a review of Group Standards in respect of improved crash resistance of fuel tanks;*
- ii. consideration of the feasibility of reducing fuel inventories and of utilising smaller fuel tanks;*
- iii. in respect of frontal impacts, consideration of the repositioning of fuel tanks away from the leading ends of trains from behind bogies wherever this is practicable;*
- iv. avoidance of placing fuel tanks in exposed and vulnerable locations;*
- v. examination of the use of additives to reduce the propensity of a fuel to atomise;*
- vi. the employment within fuel tanks of internal flexible linings or a honeycomb construction;*
- vii. consideration of the most appropriate material for fuel tanks; and*
- viii. recognition of the need for supporting theoretical and experimental work in respect of the foregoing. Paragraph 13.27 refers.**

Action on Railway Safety, TOCs, ROSCOs By 20/6/2002

Action Plan

RS to report in December 2001 on the programme to meet this recommendation following publication of its research theme strategy.

Progress Report January 2002

The three ROSCOs, TT, FGW, GNER, Bombardier, Alstom, HSL and a group of tank/system manufacturers are jointly funding a series of tests, co-coordinated by HSL, to evaluate improvements to the fuel tanks. HSBC report that HSL completed fuel tank trials in October 2001 and bladder and honeycomb inserts giving commendable results. A joint meeting with all sponsors to discuss results was held in January 2002. HSBC has requested additional tests.

RS report that an initial draft theme strategy "Accident Survivability including Vehicle Integrity and Fire" has been produced and is being reviewed to define the package of research work that can be taken forward during the next few months. RS report that research is currently underway into fuel tank integrity. RS will review research when completed and applicable RGS will then be decided. More work is needed and no proposal at this stage has been made.

LUL report that the only diesel locos used are engineers' trains that are all fitted with tripcocks and have very limited interface with passenger trains.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 62

The scope of Schedule 1 to the Railway (Safety Case) Regulations 2000 should be extended so as to include explicitly the arrangements which the duty holder has established in regard to facilities, instructions and signs for the escape of persons in an emergency. Paragraph 14.3 refers.

Action on HSE By 20/12/2001

Action Plan

Action complete.

Progress Report January 2002

Railway Safety (Miscellaneous Amendments) Regulations 2001 came into force on 24 October 2001.

Although not directed to LUL, they report that they are uncertain about the practicality of fulfilling some of the specific points but they are considering if there are any additional, reasonably practicable, measures that they can adopt.

HRA report that member railways have asked HRA to consider a set of standard signs for use on heritage railways.

Status

Action completed.

Recommendation 63

The provisions in the schedule as to evacuation and escape should be supported by adequate guidance from the HSE. Paragraph 14.3 refers.

Action on HSE By 20/6/2002

Action Plan

HSE to publish additions or revisions to the existing guidance, by 20 June 2002.

Progress Report January 2002

HSE is developing necessary guidance and plans consultation during March 2002.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 64

The code of practice on public information on train safety and emergencies should be kept up to date. Paragraph 14.6 refers

Action on ATOC

Action Plan

ATOC to review and revise as necessary the code of practice in the light of HSE's guidance by June 2002. RPC and LTUC should also be consulted. RS to consider incorporation into a RGS.

Progress Report January 2002

ATOC Operations Council will ensure that their Guidance Note GN005 'Communication of Safety Related Information to Passengers' is kept up to date and is in line with HSE's Railway Safety Principles and Guidance and any future guidance. ATOC report that they have reviewed their guidance notes on the training of on train staff on emergency procedures and communication of safety information to managers (GN003 and GN005) and they have been re-issued. ATOC will review these at least annually. RPC was involved during the review of GN005.

Status

Action closed, with commitment to review at least annually.

Recommendation 65

So far as is feasible, the safety information issued to passengers and the means by which they can be evacuated or escape from a train should be standardised. Paragraph 14.8 refers.

Action on ATOC By 20/6/2002

Action Plan

ATOC to report on the scope of standardisation by March 2002. This should include feasible proposals, together with an action plan. RPC should be consulted.

Progress Report January 2002

A joint review on behalf of ATOC's Operations and Engineering Councils considered ATOC Guidance Note GN005 'Communication of Safety Related Information to Passengers'. Following the review, ATOC will ensure that AV/ST9002 and 5 incorporates best practice contained in GN005, as will any later initiatives that seek to standardise the provision of safety information and evacuation and escape procedures. ATOC will seek to accelerate the production of AV/ST9002 and 5. ATOC report that the review of their guidance notes (GN003 and GN005) has been completed and re-issued.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 66

A system should be established for the collection of human factors information pertinent to issues of passenger safety following rail accident. Paragraph 14.8 refers.

Action on ATOC

Action Plan

ATOC, in conjunction with RS, will establish a system for the collection of human factors information and report to HSE by June 2002.

Progress Report January 2002

ATOC report that they have reviewed the recommendation and sent their views to RS who are now considering what the scope of such work should be. ATOC has also asked RS to identify whether other industries have a system for collection of human factors information and, if so, how such a system works. RS provides ATOC and all RGMs with six-monthly reports analysing the national CIRAS database. RS report that some research is underway. An initial draft theme strategy for "Accident Survivability, including Vehicle Integrity and Fire" is being reviewed to define a package of research work that can be taken forward during the next few months. RS report that they believe this recommendation does not apply to SMIS developments, as the SMIS system addresses the causation of accidents rather than events subsequent to the occurrence of an accident.

Status

Action continuing.

Recommendation 67

Passengers should be given general safety advice both before and after they have boarded their train. Paragraph 14.14 refers.

Action on TOCs By 20/12/2001

Action Plan

All passenger TOCs to report their current individual policy and practices by December 2001 to HSE. ATOC to review their existing guidance and reissue as necessary, by 20 December 2001. RPC and LTUC to be consulted.

Progress Report January 2002

ATOC report that the review of their guidance notes (GN003 and GN005) has been completed and re-issued. ATOC will review these at least annually. RPC was involved in the revision of GN005. All TOCs have reported and have introduced a variety of initiatives, for example general safety information and evacuation advice included in passenger timetables and a posters on stations advising passengers to look for and read on train emergency labels and cards. Other TOCs show a video, on continuous loop, covering general safety and evacuation arrangements.

Status

Action completed, but continuing work.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 68 Cullen central recommendation

Expert assistance should be obtained on the advice which should be given to passengers as to what to do in the event of there being a known threat of serious danger to them in remaining on board. Paragraph 14.14 refers.

Action on ATOC By 20/12/2001

Action Plan

ATOC to seek expert assistance on and promulgate general safety advice by December 2001. See recommendation 67.

Progress Report January 2002

ATOC report that the review of their guidance notes (GN003 and GN005) has been completed and re-issued. ATOC will review these at least annually. RPC was involved in discussions. FGW report that they commissioned report from Robert Gordon Institute of Technology, used in connection with the work in recommendation 67. Report shared with ATOC.

Status

Action completed.

Recommendation 69 Cullen central recommendation

The provision on board of explanatory information about the emergency facilities of individual trains is endorsed. Paragraph 14.14 refers.

Action on TOCs By 20/12/2001

Action Plan

All passenger TOCs to report to HSE their individual policy and practices by December 2001. ATOC to review their existing guidance and report on action needed by 20 December 2001. RPC and LTUC should be consulted.

Progress Report January 2002

All TOCs have reported with a variety of actions, including information on posters and tickets.

ATOC report that the review of their guidance notes (GN003 and GN005) has been completed and re-issued. ATOC will review these at least annually. The review of GN005 was discussed with RPC. ATOC do not plan immediate research on this issue, but will review the situation in April 2002.

Status

Action completed.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 70 Cullen central recommendation

The use of on-board announcements to draw attention to safety information is endorsed. Paragraph 14.16 refers.

Action on TOCs By 20/12/2001

Action Plan

All passenger TOCs to report to HSE their individual policy and practices by December 2001. ATOC to review their existing guidance and report on action needed by 20 December 2001. See recommendation 67.

Progress Report January 2002

ATOC report that the review of their guidance notes (GN003 and GN005) has been completed and re-issued. ATOC will review these at least annually. The review of GN005 discussed with RPC.

All TOCs have reported; they have reviewed current practice, examining possible amendments, or have already made changes to on-board announcements.

Status

Action completed.

Recommendation 71

The requirement for emergency signs to be luminous should be made retrospective. Paragraph 14.18 refers.

Action on TOCs, ROSCOs By June 2002

Action Plan

All passenger TOCs, and ROSCOs, to report to HSE their individual policy and practices by December 2001.

ATOC to review their existing guidance and report on action needed by 20 December 2001.

Progress Report January 2002

ATOC and the ROSCOs suggest that to ensure consistent application across the fleet recommendation 73 needs to be completed before recommendations 72 and 71. They will all be led by ATOC, working closely with RS, who will do the research as part of recommendation 73. The national fleet survey, the evaluation of group standards and the template for TOC implementation have been completed. The research programme continues to schedule and the implementation plan will be reviewed when the research is complete.

ATOC report that it is not possible to accelerate the production of AV/ST9002 and/or 3. ATOC will consider if this requirement should be included in TOCs safety case.

All TOCs have reported and are at different stages of fitment, ie complete now or have started a modification programme for completion by June 2002.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 72 Cullen central recommendation

So far as is feasible, emergency signs on all trains should be capable of being understood by passengers without the necessity to read text. Paragraph 14.19 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

All passenger TOCs to report to HSE their individual policy and practices with a feasibility report and action plan by March 2002, for implementation by June 2002. ATOC to review their existing guidance and report proposed action by 20 December 2001. See recommendation 67.

Progress Report January 2002

ATOC AVSG to ensure that AV/ST9005 incorporates the best practice contained in GN005, as will any subsequent initiatives that seek to standardise the provision of safety information that includes the provision of "pictograms" where appropriate. The national fleet survey, the evaluation of group standards and the template for TOC implementation have been completed. The research programme continues to schedule and the implementation plan will be reviewed when the research is complete. GN005 has been reviewed and reissued; revisions were discussed with RPC.

All TOCs report that they have either this work in hand and in many cases are waiting for ATOC to publish AV/ST9005.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 73

There should be research with the aim of arriving at a system of signage which is common to all trains in Great Britain. Paragraph 14.20 refers.

Action on ATOC By 20/6/2003

Action Plan

ATOC will consider their Guidance Note GN005 'Communication of Safety Related Information to Passengers', to determine if the scope of the workstreams already completed or planned through the ATOC Vehicle Standards Steering Group Standards fully encompass the issues covered by GN005, by 20 June 2003.

RS to commission and fund the market research based on ATOC specification (Rec 60) and report progress to HSE by December 2001. ATOC should consult RPC and LTUC and then co-ordinate a national roll-out plan to deliver common signage to all trains in GB, by 20 June 2003.

Progress Report January 2002

ATOC report that the national fleet survey, the evaluation of group standards and the template for TOC implementation have been completed. The research programme continues to schedule and the implementation plan will be reviewed when the research is complete. GN005 has been reviewed and reissued; revisions were discussed with RPC.

RS report that remit provided by ATOC and research will be commissioned.

Status

Action continuing.

Recommendation 74

Research should be carried out into the means of safeguarding emergency lighting systems from disablement by the forces involved in sudden deceleration. Paragraph 14.21 refers.

Action on ROSCOs By 20/6/2003

Action Plan

HSBC will build on their existing research on this issue and report to HSE by June 2003.

Progress Report January 2002

Industry has agreed that HSBC will take the lead. Recommendation 74 will need to be completed before a mechanism to provide artificial illumination required for recommendation 78 can be developed; HSBC report that the final design of the project should be complete by April 2002.

FGW report that they have shared the results of their work with the ROSCOs.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 75

The provision of "snap wands" should be considered as a supplementary means of providing lighting in an emergency. Paragraph 14.22 refers.

Action on TOCs By 20/12/2001

Action Plan

All passenger TOCs to review steps they have already taken and propose a way forward to HSE by December 2001.

Progress Report January 2002

ATOC report that the national fleet survey, the evaluation of group standards and the template for TOC implementation have been completed. The research programme continues to schedule and the implementation plan will be reviewed when the research is complete.

RS report that remit received. Wayfinding Lighting is being researched by RS and ATOC and could lead to a proposal to change a RGS in due course.

All TOCs have reported and have adopted a variety of different approaches

Status

Action completed, but further research commissioned.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 76 Cullen central recommendation

In the case of every coach (on any train) which has internal doors which slide in the same direction one of the following should be carried out by 31 December 2003:

- i. the coach should be fitted instead with opposite-handed internal doors;*
- ii. the coach should be fitted instead with double leaf internal doors; or*
- iii. a panel in the door should be rendered removable so as to enable passengers to pass through.*

The above is subject to the proviso that if the HMRI are satisfied, on application by the TOC concerned, that it is not practicable for that change to be achieved within this period, they may grant a deferment for an appropriate period in which the work is to be done. Paragraph 14.28 refers.

Action on TOCs, ROSCOs

Action Plan

Angel Trains, working with the other ROSCOs, will produce a detailed plan for each TOC for December 2001 and for implementation by 31 December 2003.

Progress Report January 2002

ATOC Standards schedule includes AV/ST9002 "Emergency Egress – Provision of Equipment and Escape Route". It supplements GM/RT2457 "Structural Requirements for Doors and Gangways on Railway Vehicles" specifically to deal with egress in an emergency. ATOC will review the schedule to ensure that it incorporates the lessons of Ladbroke Grove and Hatfield. ATOC report that it is not possible to accelerate the production of the proposed standard.

Angel Trains report that they have completed a review of the fleets on which internal doors operate in the same direction. Detailed proposals to provide opening panels in the doors for the HST and class 442 vehicles are under development and emergency hammers have been provided for class 175 and 180 vehicles. ATOC report two different prototype door designs have been fitted to a FGW HST carriage and will now be tested in traffic.

HRA report that they will consider the reports on these issues.

Status

Action progressed but continuing work.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 77 Cullen central recommendation

The staff-only doors on all trains should have an override device to enable them to be used by passengers in an emergency. Paragraph 14.29 refers.

Action on TOCs, ROSCOs By 20/12/2001

Action Plan

ATOC to produce risk analysis and feasibility action plan for fitment and recommendations for the way forward by December 2001.

Progress Report January 2002

ATOC report that the initial report has been received from the consultants. This advises that the use by passengers of staff-only doors which access a driving cab is to be avoided and the current arrangements will not be changed.

All TOCs have reported and report that no action has been taken following the 11 September terrorist attacks and resulting security changes. Many TOCs are concerned about the feasibility and the probability of abuse

Status

Action ongoing, but further discussions needed.

Recommendation 78 Cullen central recommendation

Signage primarily in the form of pictograms similar to those used on aircraft, and depicting the correct operation of emergency door mechanisms, should be developed. The signage should conform to current human factors standards on signage and be displayed prominently adjacent to each door and beside the door release mechanisms, as well as within the carriage. The mechanisms should be provided with artificial illumination to highlight their location at all times, with a back-up power supply in case of an emergency. Paragraph 14.34 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

TOCs, in association with ROSCOs, in respect of each vehicle, will report to HSE the development of generic pictograms, by 20 June 2002. Report to include roll out plans.

Progress Report January 2002

ATOC report that the national fleet survey, the evaluation of group standards and the template for TOC implementation have been completed. The research programme continues to schedule and the implementation plan will be reviewed when the research is complete. ATOC note that recommendation 74 will need to be completed before this recommendation.

RS report that remit received from ATOC and being considered.

All TOCs have reported and where pictograms are not already in place, plans are in hand to complete fitment by June 2002.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 79

The daily routine check of every train should include confirming that all ladders can readily be used. A mechanism to enable ladders to be released quickly should be devised and fitted. Paragraph 14.35 refers.

Action on TOCs By 20/12/2001

Action Plan

TOCs to amend instructions and confirm to HSE what systems they have in place, by 20 December 2001.

Progress Report January 2002

All TOCs have reported and passenger TOCs report that daily checks of ladders are carried out. Other TOCs report that they have reviewed their provision and are content with current arrangements.

Status

Action substantially complete, remainder due by summer 2002.

Recommendation 80 Cullen central recommendation

There should be a thorough review of the adequacy of the number of, and signage relating to, emergency hammers. This should include the provision of means of illuminating the location of hammers in an emergency, with a back-up power supply in case of emergency. Paragraph 14.46 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

ATOC to report to HSE, with proposals for action, by 20 June 2002.

Progress Report January 2002

ATOC report that they have sponsored a three part multi-faceted investigation and solution development program and that Interfleet has been appointed to manage the programme. The national fleet survey, the evaluation of group standards and the template for TOC implementation have been completed. The research programme continues to schedule and the implementation plan will be reviewed when the research is complete.

RS report that remit received from ATOC. It will be for ATOC/TOCs to implement the decisions arising from the research. All TOCs report that whilst they have reviewed the current provision of hammers, they are waiting for the results of the RS study before making significant changes.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 81 Cullen central recommendation

There should be research into the feasibility of, and risks associated with, removable windows, the adequacy of windows as a means of emergency egress, the number of dedicated windows which are necessary and the provision as to the maximum distance between each passenger and a bodyside door or emergency exit. Paragraph 14.46 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

RS to report to HSE, with action plan, by 20 June 2002.

Progress Report January 2002

GM/RT2456 "Structural Requirements for Windscreens and Windows on Railway Vehicles" applies. RS has confirmed it is ready to commission research into aspects of emergency egress including windows, hammers and hatches.

RS report that further research is needed before standard change proposed.

Status

Action continuing.

Recommendation 82 Cullen central recommendation

Tests should be carried out into the practicability of building emergency hammers into the passenger alarm system so that they could be released only after an alarm has been activated. Paragraph 14.50 refers.

Action on TOCs, ROSCOs By 20/06/2002

Action Plan

RS will review practicability of doing this where not already fitted, by 20 June 2002.

Progress Report January 2002

ATOC has sponsored a three part multi-faceted investigation and solution development programme; Interfleet has been appointed to manage the programme. RS report that remit received. It sees this as part of a wider research package into escape from trains.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 83 Cullen central recommendation

The incorporation of escape hatches in existing carriages should be the subject of feasibility and risk assessment and the provision of escape hatches in new carriages should likewise be considered. Paragraph 14.54 refers.

Action on TOCs, ROSCOs, Manufacturers By 20/12/2001

Action Plan

RS to report on feasibility to HSE by 20 December 2001.

Progress Report January 2002

ATOC, together with the ROSCOs, Vehicle Manufacturers have asked RS to initiate a feasibility and risk assessment into the provision of roof hatches into passenger vehicles. These issues will be included in the scope of the research to be commissioned by RS. RS report that as this is part of the whole programme related to escape the timescale is not feasible; HSE expect a detailed report by June 2002. ATOC has sponsored a three part multi-faceted investigation and solution development programme.

RS report that remit received for proposed research and has commissioned some research into escape hatches.

Status

Action continuing, for completion by June 2002.

Recommendation 84

All members of the on-board train staff (including persons working under contract) should be persons who have been trained in train evacuation and protection. Paragraph 14.62 refers.

Action on TOCs By 20/6/2002

Action Plan

TOCs to have completed training for all on-board staff, based on ATOC guidance. TOCs to have arrangements in place for refresher training for all such staff, by 20 June 2002. ATOC to review GN005 and report the need for any changes by 20 December 2001.

Progress Report January 2002

ATOC report that they have reviewed GN003, training of on train staff in emergency procedures and GN005, communication of safety information to passengers and will review both at least annually, and both have been reissued. ATOC have decided that it is inappropriate for staff other than those qualified as drivers or conductors be trained in train protection duties. However, all TOCs report that where evacuation training is not already provided for all staff, arrangements are in place to have this completed by June 2002.

RS report that while they support the principle of this recommendation they have some reservation with regard to training in protection measures given to all staff.

RITC report that they are reviewing the National Occupational Standards.

Status

Action substantially complete, work continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 85

The possibility of installing on driver-only trains a telephone by which passengers can communicate with the signaller in the event of the driver being killed or incapacitated should be studied. Paragraph 14.65 refers.

Actions on Railtrack, TOCs, ROSCOs By 20/6/2002

Action Plan

ATOC Engineering Council, together with RT, the ROSCOs and RS will review the current Radio Systems (NRN, CSR) to consider the practicality of introducing enhancements to enable passengers (in an emergency) to contact signallers. The review should also consider the facilities offered by GSM-R. ATOC to report on proposed action to HSE by 20 December 2001.

Progress Report January 2002

ATOC report that they have received an initial report from the consultants. The work covers recommendations 85, 86 and 87. The consultants have carried out an investigation into the available technology that could provide the facilities recommended by Lord Cullen. RS report that consultants completed a risk assessment and evaluation of DOO in September 2001 and RS management have agreed a way forward on all the proposed recommendations on DOO. Briefings have been given to industry contacts on the work and copies of the report are available from Railway Safety.

Status

Action continuing.

Recommendation 86 Cullen central recommendation

The feasibility of a "roaming" communication system for train staff should be examined. Paragraph 14.68 refers.

Action on TOCs, ROSCOs By 20/6/2002

Action Plan

ATOC to report to HSE with proposals for action, by 20 June 2002.

Progress Report January 2002

See ATOC report under Recommendation 85 above.

RS report that remit has been received from ATOC and research has been commissioned.

Status

Action continuing.

Passenger protection, evacuation and escape (Recommendations 62 to 88)

Recommendation 87

The possibility of remote broadcasting from outside the train, where it is not already available, should be investigated. Paragraph 14.68 refers.

Action on Railtrack, TOCs, ROSCOs By 20/6/2002

Action Plan

RT to report to HSE with action plan, by 20 June 2002.

Progress Report January 2002

RT report that GSM-R specification includes the facility for remote broadcasting from outside the train. See ATOC report under recommendation 85 above.

All TOCs report that they have reviewed their existing systems but will consider proposals for enhancements when the report is published in June.

Status

Action continuing.

Recommendation 88

The availability on trains carrying passengers of the items of emergency equipment mentioned in the standard on emergency and safety equipment should be unrestricted. Paragraph 14.74 refers.

Action on ATOC By 20/12/2001

Action Plan

Each passenger TOC will ensure that the equipment will be available for use by passengers, in emergencies. ATOC will review the Group Standard and current operating practice to determine if unrestricted access to emergency equipment is practicable and will not introduce additional safety risks due to misuse of emergency equipment and report by 20 December 2001. LUL to review their practice with respect to such equipment, by 20 December 2001.

Progress Report January 2002

ATOC report that they are reviewing GM/RT2177 "Emergency and Safety Equipment and Signs on Rail Vehicles" and current operating practice to determine if unrestricted access to emergency equipment is practicable and will not introduce additional safety risks as a result of misuse. ATOC report that the review will be completed by March 2002.

All TOCs report that they have reviewed the availability of emergency equipment and confirm that it is available for use by passengers. They also report that these arrangements will be revisited in the light of any changes to the RGS. Some TOCs report that first aid equipment is only available through their staff. LUL report that they have completed the review with further measures under consideration and await the ATOC report.

Status

Action substantially complete, work continuing.

Recommendation 89 Cullen central recommendation

A review of compliance with the above recommendations should be conducted on behalf of the HSC within six months of publication of this report, and further reviews should be put in hand as necessary thereafter. The HSC should publish the outcome of such reviews. Paragraph 15.7 refers.

Action on HSC

Action Plan

Arrangements in place to carry out the review by December 2001 and publication of the first review in January 2002. This report is a first step. Further reports will follow.

Progress Report January 2002

Publication of the first progress report was delayed to allow industry the full six months to report on their progress in implementing the recommendations.

Status

Action substantially completed, publication due March 2002.