2.

IN THE MATTER OF THE ARBITRATION ACT 1996

AND IN THE MATTER OF THE ACCESS DISPUTE RESOLUTION RULES

AND IN THE MATTER OF AN ARBITRATION

BETWEEN:

ARRIVA TRAINS NORTHERN LTD (FORMERLY KNOWN AS NORTHERN SPIRIT L TD)

Claimant

-and-

RAIL TRACK PLC (IN RAILWAY ADMINISTRATION)

Defendant

INTERIM AWARD

INTRODUCTION

1. The Claimant is a franchised train operating company. The company was incorporated in December 1995 as Regional Railways North East Ltd. The company changed its name on 11th June 1998 to Northern Spirit Ltd. It changed its name again

on 25th April 2001 to Arriva Trains Northern Ltd. The company is referred to in this award as "A TN".

3. In 1996, A TN required access over railway track infrastructure including a stretch of line at Darnall known as Handsworth Cutting on the Sheffield to Cleethorpes Line.

4. Since privatisation of the rail industry, the Respondent ("Rail track") has been and it was in 1996 the owner of railway track infrastructure including Handsworth Cutting.

5. In and since 1996, ATN have had access over parts of Railtrack's railway infrastructure including Handsworth Cutting pursuant to a Track Access Agreement dated 28th March 1996 ("the Track Access Agreement"). That agreement incorporated by reference the Railtrack Track Access Conditions 1995 (as modified from time to time) and the Access Dispute Resolution Rules, which form the appendix to those Conditions.

6. By Clause 8.2 of the Track Access Agreement, Railtrack are obliged to indemnify A TN against loss and damage incurred or suffered by it as a result of a failure by Railtrack to comply with its Safety Obligations (as defined).

7. By Clause 11.1 of the Track Access Agreement, any dispute arising under Clause 8 is to be resolved by mediation followed, if necessary, by arbitration pursuant to the Access Dispute Resolution Rules.

7. On 18th September 1996, one of ATN's trains became derailed when travelling from Sheffield to Lincoln through Handsworth Cutting. The derailment gave rise to personal injuries sustained by two members of ATN's staff and to extensive damage to rolling stock.

8. Following the derailment, a dispute arose between the parties as to whether Railtrack were obliged to indemnify A TN in respect of loss and damage incurred in respect of such personal injuries and damage to rolling stock pursuant to Clause 8 of the Track Access Agreement.

9. The dispute not being resolved by mediation, the parties agreed to appoint me, John Marrin QC, as Arbitrator to determine that dispute pursuant to Clause 11.1 of the Track Access Agreement, which appointment I accepted by letter dated 20th October 2000.

10. On 2nd, 3rd, 4th and 5th October 2001, a hearing took place at which the parties presented written and oral argument and evidence. At that hearing, A TN adduced evidence of fact from its Deputy Managing Director, Mr Stuart Baker. It also adduced expert evidence from Dr Alan Clark, the Director of Geotechnics and Underground Engineering of Messrs High-Point Rendel (Consulting Engineers). Railtrack adduced of fact from the following witnesses:

(i) Mr Alistair Cook, a Chartered Civil Engineer, who was, in 1996, Railtrack's Structures Engineer for the combined London North Eastern Zone ("LNEZ") and also the Railtrack Director's Nominee for all Group and Line Standards.

(ii) Mr David Clarke, a Chartered Engineer, who was, in 1996, the Permanent Way Maintenance Engineer for the area which included Handsworth Cutting, in the employment of Jarvis Rail Ltd ("Jarvis").

(iii) Mr Les Turner who was, in 1996, an Assistant Section Manager working under the supervision ofMr Clarke.

(iv) Mr Keith Burgess, who was, in 1996 and still is a Track Chargeman employed by Jarvis and also supervised by Mr Clarke.

(v) Mr David Anderson, a Civil Engineer, who was, in 1999, responsible for the supervision of certain remedial works at Handsworth Cutting whilst in the employment of his former employer's Messrs Thorburn Colquhoun.

(vi) Mr Kenneth Haywood, a Chartered Civil Engineer, who was responsible for earthwork structures within the LNE Zone from August 1997 to September 2000.

Railtrack adduced expert evidence from Mr Charles Laird, a Chartered Engineer, a Director of Buchanan (CE) Ltd (Consulting Engineers) and, formerly, an Associate Director of Messrs Thorburn Colquhoun Ltd ("Thorburn").

11. At the hearing, A TN were represented by Mr Christopher Jackson and Ms Ann Metherall of Messrs Burges Salmon, Solicitors, and Railtrack were represented by Mr Martin Soloman of Messrs Hay & Kjlmer, Solicitors. I record my grateful thanks to those representing the parties for their clear and concise submissions.

12. On ih October 2001 a railway administration order was made in relation to Railtrack and joint special railway administrators were appointed. The effect was that, pursuant to s.ll (3) of the Insolvency Act 1986, the proceedings in this reference were stayed. Subsequently, the Railtrack Administrator lifted that stay and notice to that effect was delivered on 22nd October 2001.

13. Having now considered the arguments and evidence placed before me, I hereby make my Interim Award, determining the substance of the dispute between the parties as follows.

FINDINGS

The Incident

14. At 5 :21 am on 18th September 1996, the Sheffield to Lincoln train was derailed when it hit a large boulder which had fallen some time before from the North side of Handsworth Cutting onto the track and had come to rest in the space between the rails ("the four foot") of the up line. The boulder became wedged between the underframe of the leading vehicle and the track. The train then travelled approximately 160 yards before coming to a halt with all wheels of the leading vehicle derailed. The trailing

vehicle remained on the rail. The train was travelling at approximately 45 mph when it hit the boulder.

15. Both the driver, a Mr Slocombe, and the conductor, a Mr Barker, suffered bruising, strains and post-traumatic stress disorder. There were no passengers on the train.

16. It was fortunate that the train derailed to the left, that is, into the area at the side of the track known as "the cess" and not to the right, that is, into the space between the two tracks known as "the 6 foot". Had the train derailed into the 6 foot, the consequences of the accident might have been much worse since the train might have come to rest in the path of oncoming traffic and caused a collision.

17. Both Mr Slocombe and Mr Barker made claims against ATN, which were managed by a claims handler, Messrs Miller Fisher. Those claims were settled at a total cost to A TN of £18,367.82.

18. The leading vehicle of the train suffered significant damage and there was minor damage to the trailing vehicle. The total cost of repairs to A TN was £152,156, against which A TN allow a credit of £1 0,000 as required by Clause 16 of the Claims Allocation and Handling Agreement dated 1[51] April 1994, by which it is bound and which limits recoverable claims for damage to property to losses in excess of £1 0,000.

19. ATN's claim to an indemnity under Clause 8 (2) of the Track Access Agreement is, accordingly, for the principal sum of £160,523.82 plus interest. Railtrack admit the principal sum, subject to liability.

The Cause** of the **Incident

20. As indicated above, the immediate cause of the incident was a boulder which had fallen onto the track. It had come to rest a few feet to the west of the 44 mile post. That point is approximately half-way along the length of Hands worth Cutting.

21. The cutting was excavated into the natural bedrock of the Middle Coal Measures and penetrates a sequence of mudstones and sandstones. The mudstones are more prone to weathering than the sandstone, which results in stronger prominent sandstone horizons with near vertical faces underlain by weaker mudstones, which generally form shallower slopes. As the mudstone deteriorates, the products of the weathering process tend to move down slope under gravity. The process progressively reduces the support to the overlying harder sandstone horizon. Eventually, the process leads to rotation of the sandstone blocks and toppling failures, particularly where the overlying rock is jointed.

22. In the vicinity of the 44 mile post, the foot of the slope adjacent to the up line comprises an exposed horizon of sandstone with a roughly vertical face of approximately 2 metres in height. Above that, there is a stratum of mudstone sloping at about 40 degrees and extending upward some 13 metres vertically. Above that, there is a further horizon or ledge of sandstone ("the sandstone ledge"), with an exposed face of up to 1.5 metres in its vertical dimension. The boulder which caused the derailment became detached and fell from this ledge.

23. The fact that the boulder reached the track at all caused some surprise. In particular this is because the cess at that location is unusually wide, measuring some 6 metres approximately. Furthermore, the depth of ballast on which the track is laid is unusually thick at that location. For these reasons, there was some question as to how the boulder could have reached the four foot of the up line.

24. The explanation is that there was, by chance, a section of rock which protruded outward from the vertical face of the lower sandstone horizon at the foot of the Cutting. Having become dislodged and fallen down the slope, the boulder struck this protruding section of rock and bounced so as to land in or roll into the four foot.

Safety Obligations and Group Standards

25. Upon rail industry privatisation in 1994, Railtrack assumed responsibility for the maintenance and renewal of the network infrastructure.

26. Sections 2 to 4 of the Health & Safety at Work Act 1974 ("HSW *A")* required Railtrack to take safety measures in the following terms:

> *"2(1) It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees.*
>
> *3(1) It shall be the duty of evelY employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety.*

4(2) It shall be duty of each person who has, to any extent, control of premises to which this section applies or of the means of access thereto or egress there from or of any plant or substance in such premises to take such measures as it is reasonable for a person in his position to take to ensure, so far as is reasonably practicable, that the premises, all means of access thereto or egress there from available for use by persons using the premises, and any plant or substance in the premises or, as the case may be, provided for use there, is or are safe and without risks to health".

27. Further, the Management of Health & Safety at Work Regulations 1992 ("the 1992 Regulations"), by paragraph 3, required Railtrack to make risk assessments in the following terms:

"3(1) Every employer shall make a suitable and sufficient assessment of

(a) the risks to health and safety ofhis employees to which they are exposed whilst they are at work; and

(b) the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking,

for the purpose of identifYing the measures he needs to take to comply with the requirements and prohibitions imposed upon him by or under the relevant statutory provisions.

3(3) Any assessment such as is referred to in paragraph (1) *or* (2) *shall be reviewed by the employer or self-employed person who made it if:*

(a) there is reason to suspect that it is no longer valid; or

(b) there has been a significant change in the matters to which hit relates ".

28. The Railways (Safety Case) Regulations 1994 ("the 1994 Regulations") required Railtrack to have and maintain an approved safety case setting out the details of the

safety management system used to control risk in its operations. The 1994 Regulations also conferred upon Railtrack the role of Infrastructure Controller. In that capacity Railtrack was required to approve the safety cases of operators on the rail network and also to set up a separate ann, the Safety & Standards Directorate, to act as the custodian of the operating rules known as group standards and which imposed mandatory requirements on those using the network.

29. Railtrack's Railway Safety Case was dated March 1996. The executive summary included the following passage:

> *"The Railway Safety Case demonstrates Railtrack's competence to discharge the responsibilities of an Infrastructure Controller required by the Railway (Safety Case) Regulations 1994.*
>
> *It is based on:*
>
> · *the adoption of mandatory Railway Group Standards by all parties operating on or undertaking any activity on Railtrack's infrastructure;*
>
> · *the implementation by Railtrack of a robust Safety Management System, modelled on best UK industry practice;*
>
> · *the Control of risks by the application of modern techniques to the Railway Group's activities confirming those identified by BR's wealth of operating experience* ".

At paragraph 7.23 under the heading "Infrastructure Design, Installation and Maintenance Arrangements", the safety case continued as follows:

> *"7.23 Railtrack will own and control the national mainline railway infrastructure. It will be responsible for the design, installation and maintenance of track, signalling, electrification systems, level crossings and operational buildings, tunnels, viaducts, bridges and*

other such structures together with the major stations given in Paragraph 5.4. *Railtrack will be responsible for the safety of cuttings, embankments, bridges, sea walls to the same extent that BR was previously responsible* ".

At paragraphs 10.49 and 10.50 under heading "Organisation", the safety case

continued as follows:

"10.49 The Controller, Safety Standards will produce Railway Group Standards which will apply to the Railway Group. They will be high level, designed to state what must be done, but not how to do it. There will also be a few Railway Group Codes of Practice which will guidance on how to achieve the associated standard.

10.50 There are many existing standards which were produced by BR's Group Standards Organisation (GSO). Many of them tend to be prescriptive and incorporate BR business requirements as well as safety and interworking requirements. These have been reviewed, and some 4,000 will be developed into high level Railway Group Standards. This programme will take three to four years. The review process involves ensuring that they are suitable for adoption by members of the Railway Group who have a contractual relationship with each other, and that legal opinion on each has been obtained by Railtrack. Until this process has been completed for a standard, the existing standard will remain in effect".

30. Condition 3(2)(c) of Railtrack's Network License dated 31st March 1974 required

Railtrack to comply with all relevant group standards.

Ais ***Gill***

31. In January 1995, there was a landslip at Ais Gill on the Settle and Carlisle line. The

site had no previous history of instability. The landslip caused the derailment of an

ATN train. The derailment caused a collision in which an A TN employee was killed.

An enquiry was held in February 1995 and the resulting report was published on 13th

March 1995. To some extent, the incident focussed the attention of those concerned

with safety in the industry upon the possibility that even those sites with no known history of instability could give rise to a significant safety risk. The difficulty of identifying the sites most likely to give rise to risk was highlighted in the Inquiry Report at paragraph 3.1.4 in the following terms:

> *"3.1.4 The question of risk assessment for cutting slopes is a difficult one. On the one hand it seems wrong that the only cuttings treated as 'at risk' are those with a history of slips. However, the historical period, depending on records, is potentially very long, given the age of the railway. The cutting slope at the site had presumably stood without problem since the line opened in 1876.*
>
> *Nonetheless, mindful of the need to be proactive, the panel spent some time seeking a simple formula to identify those cuttings most likely to be at risk, but were unable to find a solution. This aspect seems worthy offurther consideration* ".

The Development of Group Standards

32. At the date of the Ais Gill incident, the requirements for the inspection of Railtrack' s permanent way were embodied in a group standard entitled "Track Maintenance Handbook" and given the number *GCIEH0005* ("Handbook 5"). This included provisions as follows:

(i) By paragraph 8.6 in Section B under the heading "Track Inspector" the following:

> *"8.6 The Track Inspector will observe the conditions prevailing between and at the Board's boundaries and identify future maintenance requirements for track components, drainage, fencing, earthworks and line side management ..... The Track Inspector will personally inspect bridges and other structures ... and report any abnormal conditions found to the Engineer".*

(ii) By paragraph 3.1 in Section C under the heading "Cutting and Embankments"

the following:

> *"3.1 All cuttings must be regularly examined, particularly after severe frost, heavy rainfall or snow thaw, to check whether rock, chalk or other material has been loosened or has fallen so as to endanger traffic ..... Where there* is *any risk traffic must be protected".*

By 18th September 1996, Handbook 5 was no longer a group standard but was a code of practice. In March 1996, it was superseded by a document entitled "Railtrack Line Specification: Track Inspection Requirements" and given the number *RT/CE/S/103* ("S/1 03").

33. At the time of the Ais Gill incident, the requirements for the examination of structures on the network were set out in the group standard entitled "Examination of Structures" and given the number *GC/EH0006.* In June 1995, that group standard was replaced by a new standard also entitled "Examination of Structures" and in this case given the number GCIRT5121 ("Group Standard 5121"). For present purposes, the relevant provisions ofthis standard were as follows:

(i) Paragraph 4 of Part B which set out the underlying principle in the following term:

> *"171e principle of this document* is *to ensure that all structures which are in Rail/rack's ownership or which cross over or under Rail/rack property are examined, either by visual or detailed examination with more frequent routine obsen;ations, in accordance with laid down procedures, and at intervals not exceeding those staled in this Railway Group Standard".*

(ii) A later passage in paragraph 4 of Part B in the following terms:

> *"To comply with these principles, the appropriate Director within Railtrack must ensure that:*
>
> · *a programme for examination of all structures as defined in this Railway Group Standard* is *drawn up;*
>
> • *examinations are carried out according to the programme;*
>
> · *the findings of examinations are recorded and necessary actions taken* ".

Reference to Table 1 appears to show that a visual examination of, amongst other things, rock cutting faces is required at no greater than 12 monthly intervals. Part A shows that full compliance was to be achieved by 1 5t April 1996.

34. Two matters of controversy relating to Group Standard 5121 were:

(i) Whether the Group standard applied to rock cuttings at all;

(ii) If so, whether Handsworth Cutting was to be regarded as a rock cutting.

These two matters are considered under the heading "Reasons" below.

35. As a response to the concerns raised by the incident at Ais Gill and the subsequent Inquiry Report, a new group standard was developed, being the standard entitled "Safe Asset Management - Embankment and Cuttings" and given the number GC/RT5151 ("Group Standard 5151"). This standard was issued on 1st January 1996. The relevant provisions are as follows:

(i) Paragraph 4 in Part B sets out one ofthe principles as follows:

"The risk from Slope Failure is minimised as far as reasonably practicable by implementing auditable Examination, evaluation of the condition and maintenance procedures".

(ii) A provision within paragraph 6.1 of Part B under the heading "Requirements"

as follows:

"The RDN must prepare and maintain a list of all embankments and cuttings with a difference in level between top and bottom greater than 3m. The RDN must clearly indicate those embankments and cuttings where signs of instability are known to be present".

(iii) A further provision within paragraph 6.1 as follows:

"For all those embankments and cuttings listed, the RDN must

(c) *Consider carrying out an Examination or implementing appropriate monitoring or actions; ..... "*

(iv) A provision within paragraph 6.2 in Part B under the heading "Frequency of

Examinations" as follows:

"The RDN must determine the frequency of Examinations based on the results of any initial investigation and other subsequent evaluation of the condition or Slope Failure ..... "

(v) A provision in paragraph 6.4.2 of Part B under the heading "Evaluation of Condition" relating to locations where there has been no slope failure which could affect the safety of railway operations as follows:

> *" ..... the RDN must consider initiating an evaluation of the condition of the Embankment or Cutting. Potential sources of information upon which such an evaluation is initiated include:*
>
> - *an Examination;*
> - *evidence from historical records*

(vi) Part A which showed that full compliance with the group standard was to be achieved by 1 st October 1996.

The Trackwalking Regime

36. In the months leading up to the derailment in September 1996, the principal means by which Railtrack provided for inspection of the line was the trackwalking regime. This was a system of long standing and had been operated for many years by the British Railways Board prior to rail industry privatisation. After privatisation, the regime was implemented by maintenance contractors, such as Jarvis, using their Permanent Way Maintenance teams.

37. The essential features ofthe trackwalking regime in] 996 were as follows:

(i) All track was inspected at fortnightly intervals by a track inspector, who physically walked along the track for the purpose of observing any problems with the condition of the track and the adjacent verges, embankments and

cuttings. Track inspectors would alternate between inspections, walking the up line one week and walking the down line two weeks later. Every fourth inspection would be undertaken by a track charge man, known as a Senior Track Examiner.

(ii) Track inspectors were made familiar with Handbook 5 and they were required to follow the guidance in it. From 1st March 1996 Handbook 5 continued to be followed as a code of practice.

(iii) On completion of each inspection, a Track Examination Report was prepared.

38. In addition to the trackwalking regime, it was the practice of Mr Turner and other assistant section managers themselves to walk the track on a regular basis.

39. All track inspectors were required to demonstrate their competence to undertake inspections either through proof of substantial experience within the industry or by attending a track examination course. Track inspectors were not expected to have any geotechnical knowledge.

40. It is clear that the track inspectors undertook their duties with diligence and took a certain pride in their work. They sought to observe everything which could be seen from the track. Nevertheless, the track was regarded as the main priority. Track inspectors were not expected to observe anything which was not obvious.

41. Until the Ais Gill incident, the railway industry worked on the basis that the trackwalking regime was entirely adequate in itself for the purposes of identifying risks to safety due to the condition of the track and associated embankments and cuttings. After that incident, a different approach was adopted which was eventually to lead to the publication of Group Standard 5151.

The Zonal Earthworks Study and Associated Work

42. Mr Cook was the Railtrack Director's Nominee ("RDN") for all group standards and he was the Structures Engineer for LNEZ. When he became RDN, which was prior to the incident at Ais Gill, a decision was taken that the zone should establish its own programme for monitoring and maintenance of embankments. The result was that Thorburn (amongst others) were invited by LNEZ to tender for what became known as the Zonal Earthworks Study.

43. Tenders were invited in July 1995. It follows that LNEZ initiated steps directed towards the identification and assessment of earthworks in advance of the publication of Group Standard 5151 in January 1996.

44. The full title of the Zonal Earthworks Study was "Design of Zonal Earthworks Assessment System & Earthworks Assessment Study 1995/96". Clause 3 of the specification for the study detailed its scope, which included:

> *"conceptual and development work to design, develop, supply, test and commission an appropriate earthworks assessment system which will locate high risk earthworks sites across the Railtrack London North Eastern Zone* ".

The exercise was to include a study ("the Pilot Study") to appraise the earthworks structures on the following routes:

(i) Settle Junction to Carlisle;

(ii) Skipton to Settle Junction to Carnforth;

(iii) Bradford Interchange to Halifax - Eastwood.

45. Thorburn's tender was accepted on 8th September 1995, the work was done in the Autumn and a draft report was prepared dated ih December 1995. Following consultation, the final report was published on 15th March 1996. The Pilot Study covered 118 route miles, leaving 1,536 route miles within the zone to be surveyed.

46. During discussions which followed the publication of the draft report, Thorburn were invited to submit a proposal for a programme of work which would culminate in a Strategic Review Report which would set out the most effective plan of action to complete the earthworks study over the remaining 1,536 route miles of track within the zone.

47. On 30th January 1996, Thorburn submitted their proposals set out in a document entitled "Proposal for a Strategic Review" dated 29th January 1996. That document summarised the proposed scope of work, the programme and the anticipated costs. That cost was a relevant consideration to the project is clear from the following passage included in Thorburn's proposals:

"This will enable the most effective strategy in terms of identifying high risks sites commensurate with the costs of doing so and the consequences of any failures at the sites to Railtrack LNE".

48. At about the same time and in response to similar invitations, Thorburn submitted proposals for a Rock Cutting Pilot Study and for the inspection of certain high risk sites. In due course, Thorburn were instructed to proceed with the works which was the subject of all three proposals.

49. As regards the strategic review, Thorburn submitted their final report dated 1 *ih* April 1996 and entitled "Report on Review of Strategy Regarding Earthworks Structures" ("the Strategic Review"). In short, Thorburn recommended that walkover surveys should be undertaken at all sites in accordance with a 5-year programme. Paragraph 5.1 of the final report under the heading "Recommendations" reads as follows:

"5.1 Based on a five year overall programme for completion of the Zonal Earthworks Structural Asset Database, the following table summarises the recommended year by year actions to provide the most cost effective risk reduction during that period. In general, it is recommended that specific problem sites are inspected first, in order to expeditiously instigate remedial measures where necessary. Such sites should be dealt with generally in order of commercial priority.

Year 1 1996-97

Targeted inspections of problems sites as identified by PWME, generally in order of commercial priority.

Desk study to identify sites most likely to prove problematical based on topography (i.e. cuttings on sidelong ground) and start of inspection of same, again based on commercial prioritisation.

Cataloguing of reports formerly held by Soil Mechanics Section and subsequent cross referencing of these reports Ivith both the targeted

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sites mentioned above and previously surveyed routes.

Start of desk study to complete geometric database from Line Plans, aerial photographs etc., wherever possible.

Year 2 1997-98

Years 3-5 1998-2001

Completion of targeted site inspections.

Completion of desk study work on geometric database.

Start of site walkover of remaining routes, generally in order of commercial priority (Approx. 300 miles per year). Completion of site walkovers (Approx. 300 miles per year) ".

There was to be a desk study to identify sites to be prioritised. At such sites, there was to be a walkover survey in either Year 1 or Year 2. For other sites, the first walkover survey might take place in Year 2, Year 3, Year 4 or Year 5.

50. That cost considerations remained a factor in the strategy recommended by Thorburn is apparent from the following references in the Strategic Review:

(i) In paragraph 1 under the heading "Introduction", the following:

"The aim of the review is *to determine the most cost effective approach to completing the Earthworks Asset Survey commenced in* 1995, *and to reducing the risk of further earthworks failures of the types mentioned earlier* ".

(ii) In paragraph 4.3.4 under the heading "Prioritisation of Future Maintenance Schemes", the following:

"On the basis that Railtrack LNE Zone does not have unlimited funds to deal with earthworks on a year by year basis, it is therefore crucial that the budgets available are spent as effectively as possible. With regards to earthworks, this means achieving the greatest reduction in exposure to risk of earthworks failures and associated loss of revenue from train operators per pound spent. This therefore leads on to the two main factors to be considered in determining the cost effectiveness of any future maintenance work:

1. *The commercial importance of the route.*

2. *The likelihood of failure of the structure.*

A mechanism must therefore be developed to allow these two factors to be assessed in an objective way, permitting the level of risk reduction offered per pound spent to be calculated on a site by site and scheme by scheme basis.

It follows then that two identical schemes on two different routes can be easily prioritised on the basis of these commercial considerations ".

Inspection ofHandsworth Cutting prior to lst^{h} September 1996

51. For many years, Handsworth Cutting had been subject to the trackwalking regime. Mr Burgess was familiar with Handsworth Cutting and had walked the track on many occasions. He was aware of the rocks but thought that the risk of rock falling onto the track was very low because of the slope and because of the depth and width of the cess. Mr Burgess had walked the track in that location two days before the derailment on 16th September 1996. His Track Examination Report No. 8451 shows that he observed nothing untoward.

52. However, Handsworth Cutting was not subject to any other relevant form of inspection or examination. Thus:

(i) It was not part of the Pilot Study undertaken in Autumn 1995 as part of the Zonal Earthworks Study.

(ii) It was not regarded as a rock cutting and was, accordingly, not part of the Rock Cutting Pilot Study proposed by Thorburn and implemented in 1996.

(iii) It was not one of the High Risk Sites which had been identified ion the Zonal Earthworks study.

(iv) It was not included in a programme for examination pursuant to Group Standard 5121.

(v) It was not identified as requiring a targeted site inspection in accordance with the recommendations set out in Thorburn's Strategic Review.

(vi) RaiItrack had not prepared a list of embankments and cuttings with a difference in level between top and bottom greater than 3m in accordance with paragraph 6.1 of Group Standard 5151. It follows that Handsworth Cutting did not appear on any such list, Railtrack had not considered carrying out an examination or implemen6ng appropriate monitoring and Railtrack had not determined the frequency of examinations.

On the other hand, Railtrack did consider initiating an evaluation of the condition of Handsworth Cutting within the meaning of paragraph 6.4.2 of Group Standard 5151, such consideration being the subject of Thor bum's Strategic Review.

ALARP

53. It was ATN's case that it was Railtrack's obligation in relation to Handsworth Cutting to take steps to ensure that the risks to health and safety associated with the use of the network were kept as low as reasonably possible. That expression is commonly reduced to the acronym ALARP.

54. In this context, A TN maintained specifically:

(i) Firstly, that Railtrack ought to have procured an urgent series of walkover surveys of all of the embankments and cuttings in the North Eastern Zone within about 12 months after January 1995; and

(ii) Secondly, that if Handsworth Cutting had been subjected to such a walkover survey, then the derailment would have been avoided because the instability in the sandstone ledge from which the boulder fell on the night of 1 i^{h} September 1996 would be likely to have been identified as unstable and remedial action taken.

As to the second of these two propositions, there is common ground. Jt was accepted that, if a walkover survey had been undertaken, then it is likely that it would have been undertaken by or participated in by someone with geotechnical knowledge. Further, it was accepted that such an individual would have identified the sandstone ledge as potentially unstable. Further, it was accepted that, if such ledge had been

identified as unstable, then remedial action to dislodge the unstable parts of the rock could have been undertaken directly just as similar work was undertaken immediately following the derailment in September 1996 and on subsequent occasions.

55. There were issues between the parties as to whether it was practicable for Railtrack to procure walkover surveys of all cuttings and embankments within the period suggested. Railtrack accepted that cost was not a relevant consideration. However, it was not accepted that Railtrack could have been expected to start in January 1995 and it was suggested that there were a number of reasons why it was impracticable to achieve the task within a 12 month period.

56. As indicated above, what actually happened was that, following rail industry privatisation, no relevant steps were taken until the occurrence of the incident at Ais Gill in January 1995. Even then, no relevant steps were taken until July 1995 when Railtrack invited tenders for the Zonal Earthworks Study. A TN's case was that Railtrack should have started earlier and acted differently~ As to the start date, ATN said Railtrack should have started in January 1995 and before the Ais Gill incident. As to the action to be taken, A TN maintained that Railtrack should have instituted an urgent programme of walkover surveys throughout the zone rather than procuring an independent study of the problem. ATN's case was that, if the study of the problem was required, it should have been undertaken in the period between rail industry privatisation in April 1994 and the end of that year. Underlying A TN's case was the implicit suggestion that too much regard had been given to commercial considerations which resulted in delay.

57. As to the time required for the walkover surveys, ATN relied on the evidence of their expert, Dr Clark. He was entirely convinced that the 1,536 route miles which remained unexamined after the Zonal Earthworks Study could have been surveyed in much less than the 5-year period contemplated by Thorburn in the Strategic Review.

58. On the basis of the Pilot Study, Dr Clark identified a realistic coverage by the survey teams of 30 miles per team week. On this basis, using 2 teams, Dr Clark inferred that the remaining 1,536 route miles would take some 26 weeks to survey. Using this figure, Dr Clark's view was that the entire exercise could and should be completed within 12 months, allowing 6 months for the walkover surveys, 3 months beforehand for preparation in the nature of a desk study and 3 months afterwards for collation of results.

59. The difficulties foreseen by Railtrack in achieving the task within that timescale were explained by its expert, Mr Laird, when he came to give evidence. Mr Laird's view was that such surveys could not practicably be undertaken during the Summer months because excess vegetation would obscure the surveyors' view. He regarded the months of October to March (inclusive) as "the inspection season" and he expressed the view that a minimum of two such seasons would be required to survey the 1,536 route miles in question. In this context, Mr Laird expressed the view that surveyors would be inhibited by bad weather during the October to March period and that there was a shortage of suitably qualified personnel to undertake such surveys in 1996.

60. In cross-examination, Mr Laird expressed the view that, ideally, during site work, each team would work one week on, one week off On this basis, he agreed that using 4 teams the site work could have been completed in just 24 working weeks. Later, summarising, Mr Laird said that if the proposal had been raised in July 1995 then he agreed the site work could have been completed in 6 months.

61. Later still, in re-examination, Mr Laird was inclined to suggest that his 6 month period did not allow for such matters as difficulties in obtaining possessions and the shortage of suitably qualified staff In the circumstances, this was surprising because Mr Laird had expressly adverted to the shortage of qualified staff when giving evidence in chief Furthermore, the difficulty in obtaining possessions was a factor which applied equally to the Pilot Study, which formed the basis of the assessment with which Mr Laird had been invited to agree and had agreed.

62. On these issues, I prefer Railtrack's case on the start date but I prefer the evidence of Dr Clark as to the time required to complete the walkover surveys. As to the start date, I am conscious that it was essential, in practice, for Railtrack to take independent advice about how best to survey the relevant cuttings and embankments. Given the length of time which is often required to procure such advice, I am not persuaded that it was practicable for Railtrack to commence the survey process earlier than July 1995. In terms of the time required thereafter to procure walkover surveys of the remaining 1,536 route miles of track, I accept Dr Clark's evidence that 12 months would have sufficed and that the exercise could have been undertaken and completed by the end of June 1996. Had the exercise been undertaken during that period, then, following Dr Clark's expected split of the activities required, the desk study could

have been undertaken in July, August and September 1995; the site work could have been undertaken in the inspection season favoured by Mr Laird between the months of October 1995 and March 1996; and the data could have been collated in the three months April, May and June 1996. Finally, I find that, had such steps been taken, the derailment would have been avoided because the loose material in the sandstone ledge on the upside of Handsworth Cutting from which the boulder eventually fell on the night of 1 ih September 1996 would by that time already have been removed.

REASONS

HSWA

63. The first issue is whether the indemnity set out in Clause 8(2) of the Track Access Agreement is triggered by breach on Railtrack's part prior to 18th September 1996 of the obligations imposed by sections 2 to 4 of HSW A and paragraph 3 of the 1992 Regulations. The terms of Clause 8(2), so far as material, are as follows:

> *"8.2 Railtrack shall indemnify the Train Operator ..... against all damage, losses, claims ..... incurred or suffered by the Train Operator:*
>
> *(a) as a result of a failure by Railtrack to comply with its obligations under the Safety Obligations;"*

The terms of sec60ns 2 to 4 of HSW A, so far as material are set out in paragraph 25 above. The terms of paragraph 3 of the 1992 Regulations, so far as material, are set out in paragraph 26 above.

64. On this issue, Railtrack raised a preliminary point. Essentially it argued that because Part 1 of HSW A was not such as to confer a right of action in civil proceedings it should not be regarded as giving rise to safety obligations within the meaning of the Track Access Agreement.

65. In support of this point, Railtrack referred to Section 47(1) of HSW A which is in the following terms:

> *"(I) Nothing in this Part shall be constrned:*
>
> *(a) as conferring a right of action in any civil proceedings in respect of any failure to comply with any duty imposed by section* 2 *to* 7 *or any contravention of section* 8 *n.*

66. The indemnity set out in Clause 8(2)(a) of the Track Access Agreement relates to damage caused by failure on Railtrack's part to comply with its safety obligations. Such obligations are defined in Clause 1.1 of the Track Access Agreement as follows:

> *" "Safety Obligations n means all applicable obligations and laws concerning health and safety (including any duty of care arising at common law, and any arising under statute, statutory instrument, or mandatory codes of practice) in Great Britain n.*

From that definition it is, in my view, clear that the obligations in question are not limited to obligations breach of which gives rise to a claim in civil proceedings. They include obligations, breach of which is justiciable only in the Criminal Courts.

67. As to Section 47(1) of HSWA, that provision does not more than to show that Part 1 of HSW A does not, of itself, give rise to a claim in civil proceedings. It says nothing about whether it is open to parties to contract on the basis that the rights and duties between themselves will be regulated by reference to whether or not an obligation imposed by Part 1 has been complied with. In my view, it is open to parties to contract on that basis.

68. For these reasons, I reject Railtrack's preliminary point.

69. In developing ATN's case on this first issue, Mr Jackson relied on the duties imposed by Sections 2 to 4 of HSW A and paragraph 3 of the 1992 Regulations which are set out in paragraphs 26 and 27 above.

70. In the course of argument, it became clear that the main thrust of ATN's case depended upon sub-sections 2(1) and 3(1). This is because the duties set out in Section 4 and paragraph 3 are less onerous. Since, in my view, Section 4 and paragraph 3 for present purposes add nothing to sub-section 2(1) and 3(1), the following discussion addresses the latter.

71. In respect of sub-sections 2(1) and 3(1), Mr Jackson contended that the obligation to ensure safety which was imposed was absolute subject to the qualification introduced by the expression *"so far as is reasonably practicable "* For this contention, he relied upon the observations of Lord Goff in *Austin Rover Group Limited v. Her Majesty's Inspector of Factories* (1990) 1 AC 619 (a case decided under Section 4 of HSW A) as follows (page 627):

> *"Subject to the limited qualification embodied in the phrase "so far as is reasonably practicable," it seems to me that the duty imposed upon the Defendant to ensure that the relevant premises are safe and without risks to health for any use for which they are made available is prima facie absolute".*

72. Much of Mr Jackson's argument was directed towards the test to be applied in determining whether any particular measure which could have been undertaken was one which was to be regarded as reasonably practicable and, therefore, one which should have been taken. In summary, his contention was that, in respect of such a measure, a balancing exercise had to be undertaken, weighing foreseeability, in the sense of the likelihood of the incidents of the relevant risk, in one side of the scale, against the inconvenience of taking the measure necessary to eliminate or reduce the risk (including the costs involved) in the other. Then, so Mr Jackson's contention went, the relevant measure had to be implemented unless the inconvenience was grossly disproportionate to the risk involved. In support of this contention, Mr Jackson relied upon *Edwards v. National Coal Board* (1949) 1 All ER 743 (a case decided under Section 49 of the Coal Mines Act 1911) as well as relying on the observations of Lord Goff in the *Austin Rover* case (page 625).

73. In practice, Railtrack appear to accept these contentions. They expressly adverted to the *"gross disproportion"* test in their Railway Safety Case dated March 1996 (paragraph 6.15).

74. I also accept these contentions.

75. In paragraph 62 above, I have found that it was practicable for Railtrack to undertake an urgent series of walkover surveys covering the remaining 1536 route miles of the North Eastern Zone within the 1995/1996 inspection season.

76. As to foreseeability, I recognise that the specific and rather unusual and surprising sequence of events which gave rise to the derailment which occurred on 18th September 1996 was not itself foreseeable. On the other hand, I hold that the risk of physical harm both to Railtrack's employees and to others not in their employ who might be using the network was foreseeable as a result of rockfalls from a cutting such as Handsworth Cutting.

77. Accordingly, when a balance is struck between the risk involved and the inconvenience of arranging the urgent series of walkover surveys to which I have referred (and bearing in mind that Railtrack accept for present purposes that cost is not a relevant consideration), the inconvenience is plainly not disproportionate to the risk at all, let alone being grossly disproportionate. For this reason, I hold that subsections 2(1) and 3(1) required that the urgent series of walkover surveys should have been undertaken in the 1995/1996 inspection season (if not before) and that Railtrack's failure to do so amounted to a breach not only of its duties pursuant to those sub-sections but also of Safety Obligations within the meaning of Clause 1 (1) and Clause 8(2) of the Track Access Agreement.

78. In the light of these conclusions, I therefore hold that the indemnity set out in Clause 8(2) of the Track Access Agreement is triggered by Railtrack's failure to undertake such urgent walkover surveys.

Group Standards

79. Introduction:

The second issue is whether the indemnity set out in Clause 8(2) of the Track Access Agreement is triggered by failure on the part of Railtrack to comply with group standards. The matters relied on are addressed under separate sub-headings below.

80. Handbook 5:

A TN relied on Clause 3.1 in Section C, the terms of which are set out in paragraph 32(ii) above. It was suggested that Railtrack had failed to carry out the required examinations at Handsworth Cutting. In reply, Railtrack relied upon the inspections made pursuant to the trackwalking regime. The issue between the parties was whether such inspections amounted to and were sufficient to fulfil the obligation to carry out the examinations required by the handbook. In this context, ATN's contention was that Clause 3.1 implied a regime amounting to more than the observations made by track inspectors in the context of the trackwalking regime. I accept this contention. Clause 3.1 plainly contemplates that special visits will be made to cuttings after severe frost, heavy rainfall or snow thaw. Furthermore, Clause 3.1 also contemplates that any rock in cuttings will be checked so as to determine whether the material has been loosened. The trackwalking regime did not provide for either of these. Given that there were no other inspections of Handsworth Cutting, I find that Railtrack failed to comply with Clause 3.1. However, it is necessary to

remember that Clause 3.1 was contained in Handbook 5 and was not reproduced in S/1 03 when that document replaced the handbook as the relevant group standard in March 1996. It lost the status of a group standard. Accordingly, the detachment and fall of the boulder on the night of 1 *ih* September 1996 could not on this score be regarded as having been caused by a failure to comply with group standards unless it was caused by a failure which occurred prior to March 1996. There was no evidence directed to this point. It seems to me that there is a material distinction between the kind of examination contemplated by Clause 3.1 and the kind of examination involved in a walkover survey such as I have held should have been undertaken between October 1995 and March 1996. Specifically, the walkover survey would have involved an assessment by an individual with geotechnical qualifications not only as to the present state of any rock but also as to any likely future deterioration. By contrast, an examination such as is contemplated by Clause 3.1 could properly have been undertaken by an individual without formal qualifications, such as one of the track inspectors engaged in the trackwalking regime, who would be required to ascertain the present condition of any rock but would not be expected to direct his mind towards the possibility of future deterioration. I am not persuaded that an examination pursuant to Clause 3.1 undertaken prior to March 1996 would necessarily have identified a loosening of the rock at the sandstone ledge from which the boulder eventually fell. Accordingly, whilst I hold that Railtrack were in breach of Clause 3.1, I am not persuaded that that breach was causally connected with the derailment which occurred.

81. Group Standard 5121:

ATN relied on the provisions of Group Standard 5121, which is summarised in paragraph 33 above, and contended that Handsworth Cutting constituted a rock cutting which ought to have been subjected to a regime of visual inspection at no greater than 12 monthly intervals. A TN's case was that Handsworth Cutting should have been included in a programme which itself should have been put in place by 1 st April 1996. It is common ground that Handsworth Cutting was not included in any such programme. However, even if it had, that would in my view not necessarily have avoided the derailment. Such a programme could, even on A TN's case, properly have provided for visual inspection of Handsworth Cutting at any time during the 12 months following 1 st April 1996. It follows that the inspection might, in any event, have come too late to avoid the incident which occurred on 18th September 1996. For these reasons, I hold that there was no relevant breach of Group Standard 5121.

82. Group Standard 5151:

In the context of Group Standard 5151, A TN relied, firstly, on paragraph 4 in Part B which identified the principles adopted, including the following:

> *"The risk from Slope Failure is minimised as far as reasonably practicable by implementing auditable examination, evaluation of the condition and maintenance procedures".*

A TN contend that Railtrack [ailed to implement the procedures referred to. I do not regard this part of Group Standard 5151 as imposing any freestanding obligations, independent of the remaining text. Rather, it seems to me that the object of paragraph 4 is to identify the principles adopted so as to enable industry users to interpret the other passages in the group standard appropriately.

83. The main thrust of ATN's case on Group Standard 5151 centred around the obligations set out in paragraph 6.1 and 6.2 of Part B, which are set out in paragraph 35 above. The heart of this part of ATN's case was that RaiItrack had failed to prepare a list of all embankments and cuttings with a difference in level between top and bottom greater than 3m. On ATN's case, it followed from this that RaiItrack had failed to undertake the other obligations imposed in respect of listed embankments and cuttings, such as the obligation to consider examination and monitoring and the obligation to determine the frequency of examinations. However, it is cle'lr to me that, by 18th September 1996, the deadline for compliance with Group Standard 5151 had not yet been reached. Part A requires full compliance only by 1^{5t} October 1996. It is impossible to say there was a failure to comply at a time when the date for compliance had not yet been reached.

84. The third part of A TN's case on Group Standard 5151 related to paragraph 6.4.2 of Part B, set out above in paragraph 35(v). In relation to locations where there had been no slope failure, Railtrack, through the RDN, were to consider initiating an evaluation of the condition of the cutting. I have already found that Railtrack did give consideration to that matter, that being the subject of the Strategic Review. Accordingly, I reject A TN's case on this point.

85. For these reasons, I hold that there was no relevant breach of Group Standard 5151.

86. Conclusion:

For the reasons set out in the preceding paragraphs under this heading, I hold that the indemnity set out in Clause 8(2) of the Track Access Agreement was not triggered by any failure on Railtrack's part to comply with group standards.

Tort

87. The third issue is whether Railtrack were in breach of their duty of care so as to trigger the indemnity set out in Clause 8(2) of the Track Access Agreement and/or liability to A TN in tort.

88. Railtrack accepted that they owed a duty of care to users of the railway infrastructure including A TN.

89. ATN's case was that Railtrack were in breach of that duty of care in failing to implement an urgent programme of walkover surveys in sufficient time to ensure that remedial work was undertaken at Handsworth Cutting such as to make safe the sandstone ledge on the up side.

90. I take the view that, after the incident at Ais Gill, Railtrack's duty of care certainly required them to take such steps as were reasonable in all the circumstances to assess the condition of all cuttings and embankments on the network. In my view, for present purposes, the key question is whether that obligation required an urgent programme of walkover surveys with site work being undertaken in the 1995/1996 inspection season or whether some of the surveys might reasonably have been deferred until the following year. The point is that, if any surveys were deferred until

the following year, then the survey of Handsworth Cutting might have been one of them and, in that event, the survey would have been too late to prevent the derailment.

91. I am not satisfied that Railtrack's duty of care was such as to require that all walkover surveys be completed in the 1995/1996 inspection season. Accordingly, I hold that there was no relevant breach ofRailtrack's duty of care.

Other Defences

92. Had I been minded to hold Railtrack liable on the basis that the trackwalkers regime failed to fulfil their obligations under Handbook 5, Mr. Solomon invited me to consider a defence of estoppel based on the proposition that it was A TN itself, in a previous guise, that had instituted the trackwalking regime in the first place.

93. In the alternative, if I was minded to hold Railtrack liable on the basis of shortcomings in the trackwalking regime, Mr Solomon maintained that liability for such shortcomings did not transfer to Railtrack by virtue of Clauses 10.2.2 and 10.3.2 of the Railtrack Transfer Scheme.

94. Since I have not held Railtrack liable on the basis of shortcomings in the trackwalking regime, these defences do not arise.

Quantum and Interest

95. Subject to one issue, the parties reached agreement as to the amount of A TN's claim and as to the amount of interest payable.

96. The issue related to the period over which Railtrack ought to pay interest. Specifically, Mr Solomon, on Railtrack's behalf, submitted that ATN should not recover interest during the period between 16th July 1997 and 16th August 1999 because that represented a period during which ATN had failed to prosecute the claim with due diligence.

97. In support of this contention, Mr Solomon pointed out that ATN received a copy of the Officer's report into the derailment on 16th July 1997 and could therefore have been expected to initiate dispute resolution procedures at or about that date. He went on to point that A TN did not in fact refer the matter to mediation until 16th August 1999.

98. It seems to me that the matters upon which Mr Solomon relies do evidence some lack of enthusiasm in prosecuting the claim. On the other hand, Railtrack have had the use of the money throughout the relevant period, whilst ATN have been out of pocket.

99. I take the view that, in the exercise of my discretion to award interest to the successful party, I should award interest to A TN to cover the period 16th July 1997 to 16th August 1999 as well as the other periods.

100. Accordingly, J hold that the sums due to ATN are the principal sum of £160,523.82 and interest in the sum of £55,657 .42, making a total of £216, 181.24.

AWARD

101. In the light of the findings and for the reasons set out above, I order, by way of interim award, that:

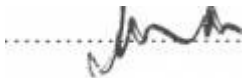
(i) Railtrack shall within 28 days of the date of this award pay A TN the sum of £160,523.82 pursuant to Clause 8.2 of the Track Access Agreement.

(ii) Railtrack shall within 28 days of the date of this award pay A TN the sum of £55,657.42 by way of interest pursuant to Section 49 of the Arbitration Act 1996.

(iii) All other issues in this arbitration (including the liability for costs and my fees and expenses) and the power to make any further award or awards in respect thereof are reserved to me.

MADE AND PUBLISHED at Keating Chambers, 10 Essex Street, London, WC2R 3AA.

Dated this 5th day of December 2001.



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John Marrin Q.C Arbitrator