

EMPLOYMENT TRIBUNALS

Mr A Knowles

Nottingham

Claimant:

Respondent:

Heard at:

On: Reserved to:

Before:

Employment Judge Milgate Members: Miss C Munton Mr A Saddique

Network Rail Infrastructure Ltd

27, 28, 29, 30 September 2016

7 December 2016 (In Chambers)

Representation Claimant: Respondent:

Miss A Hart of Counsel Mr Adkin of Counsel

REASONS FOR RESERVED JUDGMENT

The Tribunal's judgment was sent to the parties on 1 February 2017, dismissing the Claimant's claim. These are the reasons for that decision.

A. Claims and issues

- 1. By his Claim Form, presented to the Tribunal on 7 January 2016, the Claimant brings various claims of disability discrimination against the Respondent. He suffers from moderate high frequency permanent hearing loss, which is worse in his left ear. The Respondent concedes that he is a disabled person under the Equality Act 2010.
- 2. Until recently the Claimant worked for the Respondent as a Mobile Operations Manager (MOM), a job that involves working alone on or near the railway track. All employees performing this role are required by the Respondent to pass a hearing test without the benefit of hearing aids. Unfortunately, as explained below, the Claimant failed to pass the test on a number of occasions. As a result he has been transferred from the MOM role to a job in the Lincoln signal box where he continues to work. The Claimant alleges that this on-going treatment by the Respondent amounts to a breach of the duty to make reasonable adjustments and also to discrimination arising from disability.

The duty to make reasonable adjustments: issues for determination

- 3. Under section 20 Equality Act 2010 (EqA 2010) the duty to make reasonable adjustments arises in a number of situations including 'where a provision criterion or practice (PCP) [of the employer] puts a disabled person at a substantial disadvantage in relation to a relevant matter in comparison with persons who are not disabled'. In such circumstances the employer has a duty 'to take such steps as it is reasonable to have to take to avoid the disadvantage'.
- 4. The parties agreed that in this case the following PCPs were applied by the Respondent:
- a. a requirement that MOMs meet the following hearing standard, namely that hearing loss shall not exceed 30 decibels averaged over frequencies 0.5, 1 and 2 kHz in either ear;
- b. a requirement that MOMs pass the hearing test without the benefit of hearing aids;
- c. a practice whereby MOMs who fail the test are not permitted to work alone on the track, with or without the benefit of hearing aids; and
- d. a practice whereby the Respondent will not implement individual risk assessments in respect of MOMs who do not pass the hearing test.
- 5. It was agreed that these PCPs put the Claimant at a disadvantage in comparison with persons who were not disabled in that he was no longer able to carry out his MOM role and had to take a job as a signalman which does not provide him with the same job satisfaction. However there is a dispute as to whether this amounts to a substantial disadvantage when compared to those who are not disabled.
- 6. The Claimant's case is that it would have been reasonable for the Respondent to make the following adjustments:
- (i) the Respondent should have facilitated the Claimant taking the hearing test with the benefit of his hearing aids (a test which it is accepted he would have passed);
- (ii) the Respondent should have adjusted its policy to permit employees who are able to meet the hearing standard with the benefit of hearing aids to work alone on the track provided they pass a track side hearing assessment (without hearing aids).

It is conceded by the Respondent that these adjustments would have alleviated or removed the alleged disadvantage. The Tribunal must therefore decide whether those adjustments are reasonable.

Discrimination arising from disability: issues for determination

7. Discrimination arising from disability is defined in section 15 EqA 2010 as follows:-

'15(1) A person (A) discriminates against a disabled person (B) if –

(a) A treats B unfavourably because of something arising in consequence of B's disability, and

(b) A cannot show that the treatment is a proportionate means of achieving a legitimate aim.'

8. There is no dispute that in this case the "something" arising in consequence of the Claimant's disability is his failure to pass the hearing test. Similarly, the Respondent concedes that as a result the Claimant was treated unfavourably because he was no longer allowed to carry out his MOM role and was transferred to an alternative role which he does not enjoy. Accordingly, the only issue is whether the Respondent can show that its treatment of the Claimant is a proportionate means of achieving a legitimate aim.

B. Evidence

- 9. The Tribunal heard evidence from the Claimant on his own behalf. He also called Mr Paul Clyndes, who is employed by the Rail, Maritime and Transport Workers' Union (RMT) as a Senior Health and Safety Officer. For the Respondent, we heard from (i) Ms Jane Manders, who works for the Respondent as an Occupational Health Specialist, (ii) Mr Andrew Brewitt, the Claimant's line manager and (iii) Mr Ashley Jackson, the Respondent's Operations Manager in Lincolnshire. There was an agreed bundle of nearly 800 pages.
- 10. Judgment was reserved to 7 December 2016. We decided that the claims failed. Our conclusions were unanimous.
- 11. Judgment having been sent to the parties on 1 February 2017, these reasons are now provided to explain our decision.

C. Findings of fact

Background

- 12. The Respondent owns and operates the majority of Britain's rail infrastructure. On 1 September 2014, it was reclassified as a public sector organisation. Since then spending within the organisation has been under particular scrutiny and it therefore has limited resources to research, investigate and analyse proposed changes to medical standards.
- 13. The Claimant started working for the Respondent on 28 August 1984 and was appointed to the role of Mobile Operations Manager (MOM) at some point in 2000. The Claimant enjoyed the MOM role and performed his duties well. In his evidence to the Tribunal, Mr Jackson (the Lincoln Operations Manager) described the Claimant as "a good, professional man".

The MOM role

14. Workers performing the MOM role are required to attend trackside incidents and are often the first of the Respondent's employees to arrive at the scene of an incident or emergency. As such they are effectively first responders and so their work is varied and unpredictable. They work in all weathers and sometimes have to operate in the dark. They frequently work alone on or near the track, where they may be called upon to perform a range of duties including manually operating failed points or railway crossings, inspecting broken rails, or removing objects from the line. Equally if there has been a signals failure they may have to place a detonator on the track to slow a train down. As a result they are often working in an inherently dangerous situation and the role is classified within the industry as "safety critical". The danger posed is not simply being hit by a train. It is also the case, as Mr Jackson made clear in his evidence to the Tribunal, that when a train passes by a vacuum is created, creating a risk that an individual who is positioned too near the track is sucked in. As a result workers will only be in a position of safety when a train is passing if they are at least 1.25 metres from the nearest line on which a train might approach, provided the speed limit on the line is no more than 100 mph. If the speed limit is higher than the safe distance is at least 2 metres.

- 15. There was a lot of evidence about the duties of a MOM and the level of risk to which he or she is actually exposed when carrying out his or her duties, given the safe systems of work established by the Respondent. We accepted the Claimant's evidence that usually, when a MOM works on or near the line, trains will not be running at full speed. However, as the Claimant conceded, this is not invariably the case. One example, given by Mr Jackson, concerns the situation where an automatic crossing fails, and a MOM is called upon to operate the crossing manually. As part of this process the MOM will need to place (and later remove) a red lamp and board on the line, after which he is expected to retreat to a position of safety. To minimise the risk in this situation an approaching train would normally be cautioned by a signaller and so should be proceeding slowly. However, as Mr Jackson made clear if the signaller has, for some reason, failed to caution the train it would be going at normal speed, creating a very dangerous situation, particularly if that particular stretch of track does not give the train driver good visibility of those working on the line ahead. A MOM will then be largely reliant on his own ability to appreciate that a train is approaching to avoid the danger.
- 16. Whilst good vision is the primary sense that a MOM will rely on to establish that a train is approaching and to identify any risks, the Tribunal accepted the evidence of Mr Jackson (who had himself performed the MOM role) that "on an open line you also need to listen' because sometimes you can hear a train before you can see it. That evidence was supported to some extent by that of Mr Clyndes, a Senior Health and Safety Officer for the RMT who gave evidence for the Claimant. Mr Clyndes explained that the MOM role sometimes requires the worker to walk along the track to get to the place where he needs to work. In this situation the worker will, if possible, walk in the opposite direction to the train in order to see it coming. However there are circumstances where he will not able to do this, for example he may be working on a line that is bi-directional.
- 17. There are other reasons why the ability to hear is an important safety factor. A MOM may need to concentrate on the job in hand (for example if he is placing a detonator on the line), and that may make it more difficult to rely on his vision and keep looking up to check whether a train is coming. A MOM also needs to be able to hear warning alarms when working on or near the line, particularly because these days some trains are quieter than in the past. As a result it will be the train horn or alarm, rather than the sound of the train, that alerts the MOM to danger.

- 18. There are a number of different kinds of alarm that operate on or near the track. These include a train horn, a trackside safety alarm and a level crossing alarm. There may also be shouted warnings from other staff or members of the public.
- 19. The environment in which a MOM operates may well be a noisy one. There was uncontested evidence to the effect that in Lincolnshire, where the Claimant works, there could be agricultural machinery or scrap yards operating close to the line. There could also be noise from military aircraft.
- 20. There is an office based component to the MOM role but a MOM will work on or near the railway line for at least 20% of the time.

Industry hearing standards

- 21. The Respondent is subject to the provisions of the Railways and Other Guided Transport Systems (Safety) Regulations 2006. Regulation 24 requires it to ensure that staff involved in safety critical work are competent and fit to undertake such activities. Safety critical work includes, but is not limited to, the MOM role: see Part 4 regulations 23-26 of the 2006 Regulations. As a result of these provisions the Respondent is obliged to have a medical fitness standard (including a hearing standard) for all safety critical workers. However the regulations are not prescriptive as to the precise standard to be applied: that is a matter for the Respondent.
- 22. Guidance in setting medical standards is available from the Rail Safety Standards Board (RSSB). This organisation is responsible for developing industry wide standards. It has 73 member companies, including the Respondent and three other infrastructure managers. Until relatively recently the standards set by the RSSB were mandatory for the industry. However, as Ms Manders (one of the Respondent's Occupational Health Specialists) explained to the Tribunal, that changed about six years ago and the RSSB now produces guidance only.
- 23. The RSSB Guidance's on hearing standards for a lone track worker (such as a MOM) is based on a standard first introduced in the 1990s. This is set out in the RSSB's Guidance document published in March 2012 as follows:-

"Infrastructure managers ... should identify the hearing standards for each occupation ... It should be noted that the widely adopted hearing standard for persons who are required to maintain their own safety when working on or near the line is that hearing loss should not exceed 30 decibels averaged over frequencies of 0.5, 1 and 2 kHz'.

That passage is repeated word for word in the latest RSSB Guidance issued in 2014.

24. The 30 decibel standard is the benchmark currently accepted within the industry for those working alone on or near the track. Despite the fact that the RSSB standard is no longer mandatory there was no evidence that any of the RSSB's 73 member companies have diluted this standard and allowed the test to be taken with hearing aids.

The Respondent's hearing standards

- 25. In order to comply with the 2006 Regulations the Respondent requires all employees and contractors working on infrastructure managed by Network Rail, who number many thousands, to comply with certain medical fitness standards, including hearing standards. These standards are set out in a document entitled 'Competence Specific Medical Fitness Requirements' (the Medical Fitness Requirements') published in 2008.
- 26. In the case of the hearing standard for MOMs the company has, alongside others in the industry, decided to follow the RSSB Guidance and adopt the 30 decibel standard. As Ms Manders told the Tribunal, this standard is designed to ensure that a worker has a minimum hearing level in a noisy environment and that he can hear warning shouts and safety communications. Accordingly paragraph 6.4 of the Medical Fitness Requirements provides that 'Hearing loss for Level 1 [which covers MOMs] should not exceed 30dB averaged over frequencies of 0.5,1 and 2 kHz in either ear... Provided the standard is met without the use of a hearing aid, a hearing aid may be used to improve hearing further.'
- 27. Level 1 is the highest hearing standard applied by the Respondent and reflects the fact that the MOM role is inherently dangerous because it requires lone working on or near the line.
- 28. MOMs are subject to frequent hearing tests. If a MOM fails the hearing test then he or she is not permitted to work unaccompanied on the line even if they can get their hearing to the required standard with the assistance of a hearing aid. However they are allowed to continue working on the track, provided they are accompanied at all times in which case they will be allowed to use a hearing aid to improve their hearing.

The RSSB research: T664

- 29. In 2008, the RSSB commissioned research entitled "The use of digital hearing aids by safety critical staff", also known as T664. This research was prompted by the fact that hearing aid technology had progressed rapidly and modern digital hearing aids had overcome many of the limitations of older analogue models. It was therefore felt that it was time to explore whether safety critical staff diagnosed with impaired hearing should be permitted to continue working if fitted with digital hearing aids.
- 30. Before the research commenced, the project was discussed with representatives from both the RMT and ASLEF Unions. It was decided that despite the all-embracing title of the research project, the scope of the project would be restricted to train drivers, train managers (eg conductors and guards) and platform staff. It would <u>not</u> cover track workers like the Claimant. The reason for this decision appears to have been that when train crew failed the test, they usually had to leave their posts, representing a loss to both the industry and the individuals concerned. By contrast, track workers who failed to meet the hearing standard could usually be found other roles or be accommodated in some way so that they could keep working within the industry. It was therefore considered more important for the research to focus on train crew.

- 31. In his evidence to the Tribunal Mr Clyndes (the RMT's Senior Health and Safety officer) candidly accepted that his union could have pushed for the T664 research to have a broader remit so as to cover track based roles, but that it failed to do so, leaving track workers like the Claimant outside the scope of the project.
- 32. The T664 research project was a thorough and well planned piece of work, taking about a year to complete. It included a safety analysis of the key risks associated with impaired hearing. These included consideration of the risk if the hearing aid batteries failed, whether the directional hearing ability of workers would be sufficient when wearing hearing aids and the appropriate hearing aid settings for different environments, whether hearing aids were sufficiently waterproof and whether employees would be safe when at the trackside and hear trains coming. To help assess these risks a trial involving 15 members of staff (five conductors and ten drivers) from a number of different companies was set up. All fifteen of these workers had failed the hearing test but were fitted with digitial hearing aids and allowed to resume their duties. They were all monitored over a period of approximately six months and were interviewed at intervals throughout the study. Operations managers at the various companies were also interviewed as were a number of other train crew. The study also included a detailed cost benefit analysis
- 33. At the end of the study the researchers produced two reports, a technical report for audiologists and occupational health physicians, and a final operational report for train operators and safety regulators. This latter report ran to some 40 pages. Its conclusions were as follows:

"From our safety analysis which covered train drivers, train managers (eg conductors and guards) and platform staff we have concluded that:-

• the additional risk posed by staff with digital hearing aids undertaking safety critical roles is minimal, subject to them working within a safe system of work and

• the majority of concerns identified by stake holders are either not significant or can be readily managed by the application of appropriate controls."

The researchers therefore recommended that there could be a relaxation in hearing standards for such staff, so that those who failed the hearing standard could return to their jobs provided that they wore suitable digital hearing aids. This was on the basis that the staff in question could be 'expected to hear the alarms, alerts and speech required to ensure that train operations are carried out safely'. Their research also concluded that for most purposes hearing aids should be set in the 'omni-directional microphone setting'. However in noisy situations the 'directional setting' might be more appropriate ie where the hearing aid amplifies sounds from in front of the user rather than behind. A six page safe system of work was also produced as part of the research project. This includes a 'retraining' stage (applicable once a staff member had been fitted with hearing aids). This is designed to ensure, amongst other things, that 'the individual knows when to use the different programmes on the hearing aid and their responsibilities'. The safe system of work had been tested on the 15 drivers and conductors who had taken part in the trial.

34. As noted above, the RSSB's 2012 Guidance adopted the recommendations of the T664 research project, summarising the research findings in Appendix C of

the Guidance. There are some statements within Appendix C which, taken out of context, appear to suggest that the conclusions of the research project can be applied across the board to all safety critical roles (see Part C4). However when the Guidance document is considered as a whole, it is clear that the research was restricted in scope to train crews and platform staff only and that the RSSB has <u>not</u> abandoned the 30 decibel standard for track-based staff. This is apparent from paragraph GN20 of the Guidance which, as noted above, states that 'the widely adopted hearing standard for persons who are required to maintain their own safety when working on or near the line is that hearing loss should not exceed 30 decibels averaged over frequencies 0.5, 1 and 2 kHz in either ear'.

- 35. In addition, although Appendix C of the Guidance acknowledges that the recommendations and methodology of the research project are relevant to other safety critical roles, it does not advise wholesale application of those recommendations to other safety critical roles. On the contrary the Guidance is much more cautious, warning that before applying the recommendations more widely, infrastructure managers and railway undertakings would need to conduct 'additional task analysis and risk assessment where a safety critical role [such as the MOM role] differs significantly from train movement tasks.' The latest version of the Guidance, published in 2014, is to the same effect.
- 36. Since 2008 the RSSB has not commissioned any further research into the use of digital hearing aids for track-based workers, such as a MOM. There is currently no other research being conducted in this area whether by the RSSB, the Respondent or any other organisation in the railway industry. However there was limited evidence before us to the effect that since 2008 there have been technological advances in this area, for example in relation to water resistant hearing aids and the compatibility of hearing aids with mobile phones. However there was no evidence that this improved technology had been tested in the context of lone track working.

The Respondent's reasonable adjustments policy

- 37. The Respondent's reasonable adjustments policy refers to the need to take steps to remove, reduce or prevent the barriers that a disabled employee faces at work. It gives examples of such barriers, including "*inflexible organisational procedures and practices*".
- 38. It also provides:

"If an adjustment would increase the risk to the health and safety of anybody, including your disabled employee, then you should consider this when deciding what is reasonable. Your decision must be based on a thorough assessment of risk and not on assumptions." (para 3)

The Claimant's hearing loss

39. The Claimant has a history of longstanding hearing difficulties and suffers from significant permanent hearing loss. The expert report commissioned for these proceedings from Dr Hariri, a consultant audiovestibular physician, provides as follows:-

"[The Claimant] has high frequency permanent hearing loss. The loss is worse in the left ear... The loss is likely to cause significant hearing difficulties for everyday activities. Hearing difficulties are more noticeable in noisy environments...

Mr Knowles would have more difficulties hearing high frequency sounds such as consonants, woman and children's voices, certain high frequency telephone or warning rings/sounds... He will have difficulties hearing speech in unfavourable listening conditions including noisy environments, group situations or when Mr Knowles does not see the face of the person talking to him ... his hearing for low tones is reasonable...

Mr Knowles's hearing loss is moderate in severity around 50/ 60 decibels for high frequency sounds... Mr Knowles is able to converse in quiet environments at close distance, relying on hearing and lip reading. In noise the important weak high frequency consonants are drowned by low frequency noise and make conversation difficult. In noise, Mr Knowles might hear something but he is unlikely to understand running speech or discriminate words. For example, tea can be confused with sea and six with seven.

- 40. In line with this medical evidence, the Claimant accepts that he has difficulties hearing speech where there is background noise (for example if he goes to a pub that is crowded he cannot hear what anyone is saying). However he maintains he does not have difficulty with lower frequency sounds such as train horns.
- 41. Since June 2012 the Claimant has been provided with 'behind the ear' hearing aids by the NHS. When he wears his hearing aids the Claimant's hearing is within the normal range so far as the 0.5, 1 and 2 kHz frequencies are concerned and so he would meet the hearing standard if he took the test wearing his hearing aids.
- 42. However the Claimant has not found the hearing aids to be completely satisfactory as they amplify all sounds, not just the ones he wants to hear. As a result, as he explained in his disability impact statement, if he wears them in a noisy environment it can still be difficult to hear what is being said to him. This is particularly true of the signal box where he now works, as it is noisy and the sound in the room echoes because of the high ceiling. Because his hearing aids amplify all sounds he is subjected to a cacophony of noise and can find it difficult to hear what others are saying to him, sometimes being forced to hold a discussion in the corridor to get over this problem. That being the case he has tended not to wear his hearing aids when working as a signalman, although he would wear them if he were allowed to go back to the MOM role.

The events leading to this case

43. The Claimant attended for a routine hearing test on 29 February 2012. The test was carried out by BUPA, the Respondent's occupational health provider. Unfortunately, the Claimant failed the hearing test as the average loss in his left ear was 38.3 decibels: see paragraph E2 of Dr Harari's report. As a result BUPA declared the Claimant fit to work only with restrictions, including a requirement that he be accompanied on the track. (Although the Claimant also has some hearing loss in his right ear, it is only the left ear that has ever failed the standard).

- 44. A further hearing test was conducted by BUPA on 12 March 2012. Again, the Claimant failed the hearing test in his left ear. Once again the average hearing loss was 38.3 decibels and so the restrictions on his work remained. It was not considered possible to provide a colleague to accompany the Claimant whenever he was working on the track and so it was decided that he should be temporarily redeployed as a signaller, where the hearing standard is not so high. Although this job was on a lower grade than the MOM role, the Claimant's pay was protected.
- 45. The Claimant does not enjoy the signalman role. He finds it boring and frustrating and misses the variety and engineering aspects of the work of a MOM. He also finds the signal-box a noisy and unpleasant environment and, as noted above, has particular problems when wearing his hearing aids. He dislikes the job so much that he no longer volunteers for overtime, something he did quite often when working as a MOM.
- 46. On 22 May 2012, the Claimant attended a review meeting with his line manager, Andrew Brewitt to discuss his hearing problems. The Claimant told Mr Brewitt that he was about to be provided with a hearing aid. However Mr Brewitt told him that this would not resolve the problem. The test had to be passed without the benefit of a hearing aids and so he could not go back to the MOM role as things stood. However a vacancy at the Lincoln signalling centre would be held open so that there would be a suitable and secure position for the Claimant should he be unable to continue in the MOM role. The Claimant was very disappointed by this response as he had hoped that he would be allowed to return to the MOM role if he could meet the hearing standard with the help of a hearing aid.
- 47. On 6 June 2012, the Claimant failed a third hearing test in his left ear. The hearing assessment was carried out by Dr Hadley of BUPA. This time the average loss was 31.6 decibels, only marginally outside the Respondent's hearing standard.
- 48. The Claimant felt that he could work safely on the track with hearing aids and so he drew Dr Hadley's attention to the T664 research project referred to above. Dr Hadley considered this issue but advised the Respondent that the RSSB guidance only referred to train drivers and the like and that "there is no equivalent research guidance specifically for track workers whose work conditions are not and cannot be controlled'. However he also commented that "the employer may decide to allow a person to continue performing their duties with a hearing aid after making an operational risk assessment and instituting a safe system of work".
- 49. Shortly after this assessment the Claimant raised a formal grievance arguing that although the T664 research had been conducted on train drivers 'the testing proved conclusive enough to broaden the safety case to all safety critical track workers'.
- 50. On 29 June 2012, the Claimant was fitted with hearing aids by the NHS. As noted above he does not always wear these when working in the signal box.
- 51. On 7 July 2012, Dale Coupeland, a local Operations Manager, carried out a paper-based risk assessment of the Claimant's role. Mr Coupeland noted that the Claimant might not be able to have sufficient audible warning of

approaching trains when on the track and that other potential problems were "inability to hear warning signals" and "communication (hearing and understanding of instructions)".

52. On 20 September 2012, a case conference about the Claimant was held in London. Attendees included the Claimant's line manager, Mr Brewitt, and Chris Hext, the Respondent's Head of Occupational Health and Safety. However, having considered the tasks required of a MOM, the meeting concluded that:-

'With all the information available and after much sensitive deliberation... at this present time there is not enough scientific evidence to challenge the [Respondent's hearing standard] and therefore any derogation is inappropriate at this time.'

- 53. On 28 September 2012 the Claimant took it upon himself to arrange a hearing test with a company named Express Medicals. This time the Claimant passed the hearing test by a small margin. The Respondent therefore referred him to BUPA for a further test. The BUPA assessment took place on 16 October 2012 but on this occasion the Claimant failed the test (making this the fourth BUPA test he had failed). This time the average loss in his left ear was 41.7 decibels over the relevant frequencies, and so considerably below the required standard of 30 decibels.
- 54. On 26 October 2012 the Claimant went back to Express Medicals and once again passed their test. As a result the Company asked Miss Valmai Hughes, one of the Respondent's Occupational Health Specialists, to look into the testing procedure used by Express Medicals. She concluded that Express Medicals used a manual audiogram whereas BUPA used an automatic self recorded system and that the latter gives a more accurate result. This evidence was not challenged by the Claimant at the tribunal hearing.
- 55. It was decided that the Claimant should have a track side risk assessment without hearing aids. This was carried out on 22 May 2013 by Melanie Kitchen, an Operational Risk Assessor, and two health and safety advisers. They stood by the side of the railway and asked the Claimant to tell them when he heard any noise. She concluded that the Claimant heard all the noises that those present heard and that, although the environment was noisy, he could 'hear trains whistling with no problems'.
- 56. Unfortunately in July 2013, the Claimant was involved in a cycling accident leading to a broken shoulder. He remained off work on sick leave for over 12 months, save for a couple of weeks in February 2014. At that point, he took and passed a BUPA hearing test, although the precise results of that test were not included in the evidence before the Tribunal.
- 57. Due to the apparent fluctuations in the Claimant's hearing, it was decided that advice be sought from an ENT specialist. The Claimant duly attended for an assessment with Professor Hartley, who was instructed by BUPA, on 22 May 2014 whilst still on sick leave. Once again he failed the hearing test with a 35 decibel average hearing loss in his left ear. Professor Hartley described his hearing loss as 'moderate to severe', advising that the loss was likely to

deteriorate with age and that 'this might progress slightly more than one would expect for individuals of a similar age'.

- 58. On 27 July 2014, the Claimant returned to work in the signal-box, having recovered from his shoulder injury.
- 59. On 12 September 2014 a further track side risk assessment was carried out in Lincoln. Once again the Claimant did not wear his hearing aids during the assessment. No significant issues were identified.
- 60. On 25 September 2014 the Claimant had another BUPA hearing test and once again failed to meet the hearing standard, with an average loss in his left ear of 38.3 decibels. This meant that out of a total of seven tests carried out by BUPA he had failed six. Dr Pearlman who carried out that assessment suggested that 'an individual risk assessment be undertaken and providing that this is satisfactory to you as an organisation you may wish to allow him to continue with his role with appropriate safe systems in place.'
- 61. On 14 October 2014, the Claimant attended an occupational health assessment with Dr Farmer of BUPA. Dr Farmer suggested that the Respondent should consider:

"...whether their policy and railway hearing standard could be modified to allow an individual to meet the hearing standard through the use of hearing aids. I presume this is not a decision which can be made on a local operational level but rather at senior operational level".

In this connection he also informed the Respondent that although the Claimant was not wearing his hearing aids on a day-to-day basis he would be willing to wear them if allowed to resume his MOM duties.

- 62. At the beginning of September 2015 the Claimant discovered that Jane Manders, one of the Respondent's Occupational Health Specialists, was about to review the company's medical standards with a view to updating them the following year.
- 63. On 29 September 2015, the Claimant attended a review meeting to consider the situation. This time the meeting was chaired by Mr Jackson. He was senior to Mr Brewitt, who had previously dealt with the matter. During the meeting the Claimant told Mr Jackson that there was about to be a review of medical standards. Mr Jackson consulted Ms Manders but she could not confirm that the hearing standard would be amended.
- 64. The meeting adjourned and when it resumed Mr Jackson told the Claimant that he could not return to his position as a MOM due to medical restrictions. Instead the company would move the Claimant on a permanent basis to the signalling role and his MOM role would be advertised as a permanent job. He also told him that his pay would be protected on a permanent basis. Mr Jackson explained that he had based his decision on the current hearing standards and the information available, including the advice from the occupational health provider, namely that the Claimant's condition was fluctuating and permanent. He added that if the standards changed or there was an improvement in the Claimant's hearing and there was a MOM role available, then the Claimant could apply for it.

Current review

- 65. The Respondent is currently undertaking a review of some of its medical fitness standards. The process began in 2015 when the Respondent's then occupational health advisers, OH Assist, produced a report on medical standards in other countries and organisations. This report noted that Transport for London applies the same hearing standard as the Respondent, namely that the hearing loss of track workers must not exceed 30 decibels averaged over the 0.5, 1 and 2 KhZ frequencies in either ear. TfL also insists that track workers must meet this standard without the use of hearing aids. By contrast the report found that the standards in Canada and Australia were not as strict. The report went on to recommend that the Respondent's standard be relaxed in line with the Australian model, advising that a worker is likely to be fit for safety critical work if hearing loss is less than an average of 40 decibels over 0.5, 1, 2 and 3 kHz in the better ear and that where a worker fails the hearing test he should be permitted to use hearing aids subject to an individual risk assessment.
- 66. Following this report a project to review and update the Respondent's medical standards went live in January 2016. The aim was to draft new standards by December 2016, albeit any changes would need to be evidence based to ensure that safety was maintained.
- 67. As part of the project a working group was set up to lead the work. This group included trade union representatives. In the spring of 2016 the working group considered the recommendations of OH Assist in respect of the hearing standard but decided not to pursue them. It was felt it would not be safe to adopt the Australian model without further research as the Australian rail network and infrastructure is very different to that in the UK. It was also felt that, if the company was going to adopt a less stringent standard than that adopted by the RSSB Guidance, it was crucial to have a formal safety analysis, particularly as any change in the standard would affect not only the Respondent's own employees but also those of their contractors working on the railway. As there were insufficient resources to conduct such a formal analysis within the review process, the OH Assist recommendations could not be supported.
- 68. Subsequently in July 2016, as a result of pressure on resources, the Respondent's Chief Health and Safety Officer decided to prioritise three research projects for moving forward to the next stage of the review. This decision was taken after consultation with the unions. The selected projects are all in areas where there is research available to back up proposed changes. Research into whether hearing aids should be permitted in track based roles was not amongst them. Around the same time Jane Manders recommended that the Respondent consider conducting a similar research project to T664 for track workers. However at the time of the tribunal hearing (which was only a few months later) this proposal had not been actioned by the Respondent.

D. The relevant Law

69. The Equality Act 2010 (EqA 2010) contains provisions prohibiting discrimination against disabled people within the workplace. So, for example,

under section 39(2) EqA 2010 an employer must not discriminate against a disabled employee by dismissing him or by subjecting him to any other detriment.

- 70. Discrimination against a disabled person can take a number of forms. As noted above in this case the Claimant alleges that the Respondent's actions in preventing him from continuing to perform the MOM role and then placing him in an alternative role which did not give him the same job satisfaction constituted discrimination arising from disability contrary to section 15 EA 2010 and was also in breach of the duty to make reasonable adjustments set out in sections 20 and 21 Equality Act 2010.
- 71. Guidance on the interpretation of the Equality Act 2010 can be found in the Equality and Human Rights Commission's Code of Practice on Employment 2011 (the 'Code of Practice'). Although this is not an authoritative statement of the law it can be used in evidence in legal proceedings brought under the Act and courts and tribunals must take its provisions into account where they appear to be relevant.

The duty to make reasonable adjustments

- 72. Section 39(5) of EqA 2010 provides that an employer is under a duty to make reasonable adjustments. As noted above, section 20 EqA 2010 sets out the components of the duty, namely that a 'provision criterion or practice (PCP) [of the employer] puts a disabled person at a substantial disadvantage in relation to a relevant matter in comparison with persons who are not disabled' thereby triggering the employer's duty 'to take such steps as it is reasonable to have to take to avoid the disadvantage': see EqA 2010 s20(3).
- 73. As Miss Hart pointed out in her skeleton argument on behalf of the Claimant, the duty necessarily requires an employer to take positive steps to avoid any substantial disadvantage and this may require employers to take additional steps to help disabled people which they are not required to take for others so as to enable the disabled person to stay in employment or have access to employment: see Archibald v Fife Council [2004] UKHL 32 per Baroness Hale at paras 47 and 57 and para 6.2 of the Code of Practice. In addition the duty may be breached even if, as in Archibald, the employer has already made a number of adjustments and gone to considerable lengths to find alternative positions.
- 74. Consideration of the duty will usually be guided by the principles set out in the well known case of **Environment Agency v Rowan** [2008] IRLR 20, as modified by subsequent case-law. This case indicates that unless the Tribunal has identified the PCP applied by or on behalf of the employer, the identity of the non-disabled comparators (where appropriate) and the nature and extent of the substantial disadvantage suffered by the Claimant then it is not in a position to judge whether a particular adjustment is reasonable to prevent the PCP placing the disabled person at a substantial disadvantage.
- 75. A substantial disadvantage is defined as one which is 'more than minor or trivial': see s212(1) EqA 2010. The Code of Practice states that 'whether such a disadvantage exists in a particular case is a question of fact and is assessed

on an objective basis'. This reflects the decision of the Court of Appeal in **Cave v Goodwin** [2001] EWCA Civ 391.

76. It is clear that the test of whether a particular adjustment is reasonable is an objective one. As a result the fact that the employer genuinely believed that the making of a particular adjustment would be too disruptive or too costly will not determine the matter. On the contrary, the Tribunal may have to substitute its own view for that of the employer in determining whether an adjustment is reasonable: see Smith v Churchills Stairlifts plc [2005] EWCA 1220. Equally the employee's view, however genuinely held, that the adjustment is reasonable is irrelevant. It is also important to appreciate that the focus of the inquiry is the adjustment itself, not the process adopted by the employer in considering the matter. As Langstaff J put it in Royal Bank of Scotland v Ashton [2011] ICR 632, EAT at paragraph 24:

'The focus is on the practical result of the measures which can be taken. It is not – and it is an error – for the focus to be upon the process of reasoning by which a possible adjustment was considered... it is irrelevant to consider the employer's thought processes or other processes leading to the making or failure to make a reasonable adjustment. It is an adjustment which objectively is reasonable, not one for the making of which, or the failure to make which, the employer had (or did not have) good reasons.'

- 77. The Equality Act does not specify particular factors that should be taken into account in determining what is reasonable; ultimately what is reasonable will depend on the circumstances of the case. So, for example, in **Chief Constable of LincoInshire Police v Weaver** EAT 0622/07 the EAT held that the employment tribunal had erred in looking at the case only from the employee's perspective. It should have examined all the circumstances including the wider operational objectives of the police force.
- 78. Bearing this general principle in mind, para 6.28 of the Code of Practice suggests that the following factors may be taken into account:
- (i) whether taking any particular steps would be effective in preventing the substantial disadvantage;
- (ii) the practicability of the step;
- (iii) the financial and other costs of making the adjustment and the extent of any disruption caused;
- (iv) the extent of the employer's financial or other resources;
- (v) the availability to the employer of financial or other assistance to help make an adjustment (such as advice through Access to Work); and
- (vi) the type and size of the employer.
- 79. The Code of Practice also suggests that risk to health and safety is a relevant factor to take into account in deciding whether it is reasonable to make the adjustment.
- 80. The EAT in **Tarbuck v Sainsbury Supermarkets Ltd** [2006] IRLR 644 stated that an employer would be 'wise' to consult with a disabled employee to be better informed and acquainted with all the factors which may be relevant in determining what adjustments could reasonably be made in all the circumstances. The EAT in that case warned that "if the employer fails to do

that then he is placing himself seriously at risk of not taking appropriate steps because of his own ignorance".

Discrimination arising from disability

- 81. Discrimination arising from disability is defined in section 15 EqA 2010, set out in paragraph 7 above. In this case the only issue for the Tribunal's consideration is whether the Respondent can show that their treatment of the Claimant was justified in the sense of being a proportionate means of achieving a legitimate aim. The key elements of the test of justification derive from the case-law of the European Court of Justice: see for example **Bilka-Kaufhaus GmnH v Weber von Hartz** [1987] ICR 110, ECJ.
- 82. The test of justification is an objective one and the burden of proof lies on the Respondent. They must produce evidence to support their assertion that the treatment is justified. It is not enough to rely on generalisations.
- 83. The concept of a 'legitimate aim' is not defined in the EqA 2010. The Code of Practice states at paragraph 4.28 that 'the aim of the PCP should be legal, should not be discriminatory in itself and must represent a real, objective consideration'. The Code also states that the health welfare and safety of individuals may qualify as legitimate aims provided the risks are clearly specified and supported by evidence.
- 84. The Code also considers the meaning of proportionate, stating at paragraph 4.31 that EU law views treatment as proportionate if it is an 'appropriate and necessary' means of achieving a legitimate aim. However it goes on to explain that 'necessary does not mean that the provision, criterion or practice is the only possible way of achieving the legitimate aim; it is sufficient that the same aim could not be achieved by less discriminatory means'.
- 85. Paragraph 4.30 also states:

"Deciding whether the means used to achieve the legitimate exercise are proportionate involves a balancing exercise. An Employment Tribunal may wish to conduct a proper evaluation of the discriminatory effect of the PCP as against the employer's reasons for applying it, taking into account all the relevant facts'.

86. Finally the Code suggests that it will be difficult for an employer to objectively justify unfavourable treatment where the employer has failed to make a reasonable adjustment: see para 5.21. However even if the employer has made a reasonable adjustment he may still subject a disabled person to unlawful discrimination arising from disability: see para 5.22. As a result, as Miss Hart pointed out in her skeleton argument, the fact that the Claimant was redeployed to a signals post (in itself a reasonable adjustment) does not mean that the unfavourable treatment is necessarily justified in this case.

E. Applying the law to the facts of this case.

The reasonable adjustments claim

Issue 1: Did the PCPs put the Claimant at a substantial disadvantage?

- 87. As noted above, the Respondent conceded that the PCPs applied by the Respondent put the Claimant at a disadvantage in comparison with a MOM who was not hearing impaired, because their effect was to prevent the Claimant from carrying out the MOM role, which in turn led to him being transferred to the signals job which he disliked intensely. The question was whether that disadvantage was substantial.
- 88. The Respondent argued that it was not, pointing to the fact that the signals job was well within the Claimant's capabilities. In addition his pay was protected.
- 89. We were not persuaded by that argument. The job involved both a loss of status and a significant loss of job satisfaction. The Claimant was being asked to work in a role he did not want to perform and in an environment that that he found difficult to tolerate, especially when wearing his hearing aids. In these circumstances the disadvantage he suffered was more than minor or trivial. It was therefore substantial within the meaning of section 212(1) Equality Act 2010.

Issue 2: Were the adjustments reasonable?

90. As noted above, the Claimant relied on the following two adjustments:-

(i) the Respondent should have facilitated the Claimant taking the hearing test with the benefit of his hearing aids, a test he would have passed; and
(ii) the Respondent should have adjusted its policy to permit employees who are able to meet the hearing standard with the benefit of hearing aids to work alone on the track provided they pass a track side hearing assessment.

- 91. We decided these adjustments were not reasonable for the following reasons:-
- (a) The MOM role is inherently dangerous because it requires lone working on tracks whilst trains are still running. In exceptional circumstances those trains could be running at full speed. Clearly if the Claimant were to be hit by a train (or sucked into the vacuum created by the train's forward motion) he could be seriously injured or killed. In these circumstances safety has to be a paramount consideration and a cautious approach is justified in assessing whether any departure from the Respondent's current practice is reasonable.
- (b) Whilst vision is the primary sense relied on to alert a lone track worker to an approaching train, we do not accept the Claimant's submission that a safe system of work depends solely on vision not hearing (see submission 62). On the basis of the evidence before us we concluded that hearing is an important secondary sense and part and parcel of any safe system. So for example, as explained above, MOMs do not always walk in the opposite direction to the approaching train and so may be reliant, at least in part, on the ability to hear an approaching train or train horn. To take another example, the focus of the MOM in an emergency situation may well be on the task in hand, so that he or she does not look up to see whether a train is approaching as often as they should. The ability to hear to a particular level is therefore an important safety standard.
- (c) Although Miss Hart suggested that the Claimant only failed the Respondent's tests by a 'narrow margins' so that his case was 'borderline', we concluded that he had a significant hearing problem and that this had to be taken into account when assessing the reasonableness of the proposed adjustments. The fact was that the Claimant failed the hearing test in his left ear on six of

the seven occasions when he was tested by BUPA (which uses the most accurate method of assessment). These tests took place over a two and a half year period, suggesting that the failure was not the result of an isolated issue, such as a head cold, or that these were rogue results. In addition whilst his average hearing loss on 6 June 2012 was 31.6 decibels - and so only slightly outside the standard, - on other occasions the failure was more marked. According to Dr Hariri's expert report, on three occasions the average loss was 38.3 decibels, on one occasion 35 decibels and on another occasion 41.7 decibels. Moreover Dr Hariri described the hearing loss as 'moderate in severity'. Dr Hartley went further, describing the Claimant's hearing loss as "moderate to severe': see para 57 above.

- (d) It cannot be said with any confidence that even if the Claimant wears his hearing aids he will be as safe as someone who can meet the hearing standard without them. On the contrary the amplification created by his hearing aids in noisy environments presents considerable difficulties for the Claimant and his ability to hear and differentiate a range of sounds including speech and alarms against background noise in a range of weather and lighting conditions is completely unproven.
- (e) The Respondent adopts a proportionate approach to hearing standards and has established a differentiated set of hearing levels, which are applied to different roles. Given the dangers inherent in the MOM role, the standard for this role has been set at the highest level Level 1- to minimise the risks. This is a considered approach, which allocates a standard on the basis of the hazards associated with a particular role. It is not a blanket requirement applied without thought or discrimination.
- (f) The 30 decibel standard applied by the Respondent to the MOM role conforms with the standard for lone track workers that is applied throughout the industry and is reflected in the RSSB Guidance. Although the RSSB's Guidance has not been mandatory for at least six years it is notable that the Claimant produced no evidence to show that any of the RSSB's 73 members – including three other infrastructure managers - have departed from the standard for a role with duties comparable to that of a MOM, suggesting that it still has wide spread support throughout the industry.
- (g) Moreover there is a value in having a single consistent hearing standard throughout the industry to avoid any confusion in the standard to be applied in such a safety critical role.
- (h) The Claimant argued that the RSSB standard had been significantly undermined by the T664 research project and that it was no longer reasonable to apply the 30 decibel standard on a pass/fail basis in light of the findings of that research. However the T664 project was restricted to train drivers, train managers (such as conductors) and platform staff. It did not apply to track based roles like the MOM role, which are very different in nature. So, for example, the usual working environment of a driver is inside the cab, whereas a MOM works outside in all types of weather conditions and may well have to communicate - whether by mobile phone or direct speech - against the elements in a noisy environment. Similarly, whilst a train driver's primary focus can be expected to be on the track ahead of him, by contrast a MOM may be inspecting or repairing equipment or putting a detonator on the line which necessarily takes his attention away from approaching trains whilst the task is being completed. So whilst the T664 research contained a very detailed analysis of the safety risks associated with hearing aids, it did so within a limited context. The special safety factors associated with lone working on or near the line were simply not addressed.

- (i) A good example of the limited nature of the T664 project is the section of the report that considers whether hearing aids will increase the risk to personal safety at the trackside. Here one of the primary assumptions in determining the level of risk is that a train driver or train crew-member will very rarely find themselves on or near the track (see paragraph 4.18 of the final report). Of course that is not the case with a worker performing the MOM role.
- (j) As as result of the limited scope of the T664 research project there are a number of potential safety risks associated with the use of hearing aids that have not been subject to detailed research or analysis in the context of the MOM role. These include - to name but a few - difficulties in communication and the risk of not hearing a warning shout or alarm, the effect of the elements on the operation of hearing aids, the risk of hearing aids malfunctioning or becoming dislodged and the risks associated with changing the batteries in adverse weather conditions. So for example, although the T664 research considered the risk of hearing aid batteries running out, it is one thing to change batteries in the confines of a cab; quite another to change them when you are dealing with an emergency situation on a railway line in adverse weather conditions and poor light.
- (k) In this context it is relevant to note that although the RSSB has adopted the recommendations of the T664 project in relation to train crew and platform staff, it has not been prepared to apply those recommendations more widely. As noted above, its most recent Guidance continues to accept that the 30 decibel standard is the appropriate industry standard for those working on or near the track. In addition the Guidance expressly warns, when discussing the T664 research, that 'infrastructure managers...may need to conduct additional task analysis and risk assessment where a safety critical role differs significantly from train movement tasks', thereby acknowledging the limitations of the T664 project and the need for further research and analysis before there is any dilution of the standard for other safety critical roles. For these reasons the Tribunal takes the view that the recommendations of the T664 project do not advance the Claimant's case.
- (I) However even if the T664 research cannot be applied to the Claimant's role, Miss Hart argues that the additional risk to his safety if he is allowed to wear his hearing aids is minimal, and that in that context the proposed adjustments are reasonable. In developing this argument she suggested that it would be highly unlikely that the Claimant's hearing aids would fail without warning, and that even if they did the safe systems of work operated by the Respondent mean that the risk of an accident is extremely small.
- (m) However these assumptions are questionable. One of the examples that she gives is where there is a points failure and the MOM is called upon to operate the points manually. In this example it is assumed that, whilst the Claimant is dealing with the points failure, all trains have been stopped and the points operator has asked for adjacent lines to be blocked. It is also implicit in her analysis that if, during this process, the batteries in the Claimant's hearing aid fail they can be changed. However in reality, as Mr Brewitt pointed out in is evidence, systems do not always work as they should. In the points example it is therefore possible that mistakes are made, so that whilst the MOM is on or near the track trains are still running. Moreover Miss Hart's analysis does not address what would happen in that scenario if the battery in the Claimant's left hearing aid were to fail. At what stage in the process of operating the points is it anticipated he will change his batteries? And would it be possible to do this successfully if the lighting is poor and there is a gale blowing? There is therefore at least a risk in this situation that the Claimant's hearing is compromised, even though trains are running. To assume, in the absence of

any detailed research equivalent to the T664 project, that this risk is minimal is in our view a step too far, a view endorsed by the Respondent's reasonable adjustments policy which states that where an adjustment might increase the risk to anyone's health and safety the employer's decision must be based on a thorough assessment of risk rather than on assumptions.

- (n) In addition when considering adjustments to such a safety critical role we were not persuaded that a track-side risk assessment without hearing aids however conscientiously performed – was any substitute for a formal research project along the lines of the T664 project. As the description of the project at paragraphs 32 and 33 above demonstrates, T644 was a detailed and rigorous study lasting nearly a year. It included interviews with relevant staff, a six month monitoring exercise, a detailed assessment of risk and a cost benefit analysis. At the end of the study two reports were produced as well as a safe system of work. By comparison the snapshot provided by a track-side assessment is much more limited. In the first place such assessments are likely to be somewhat artificial, as the worker being assessed will almost certainly take pains to concentrate - as clearly he wishes to pass the test. By contrast when he is actually working on the track in an emergency situation there is always the chance, as Mr Adkin pointed out on behalf of the Respondent, that he focuses his attention on the task in hand, rather than on warning sounds. Secondly whilst the trackside assessment aims to assess the Claimant's ability to hear if his hearing aid fails, it does not address the problems he experiences when wearing his hearing aids in noisy environments and gives no indication whether he could, for example, differentiate the sound of a train horn or a warning shout if there is agricultural machinery operating by the side of the line and his hearing aid is amplifying all the surrounding sounds.
- (o) The absence of research in this area, despite the advances in technology that have occurred in the last few years, is the result of decisions taken at both industry and company level, in both cases after consultation with the rail unions. At industry level, the decision by SSRB to restrict to restrict the scope of the T664 research project was taken with the involvement of both ASLEF and the RMT. Similarly the decision by the Respondent not to proceed with its own review of the hearing standard was taken after consultation with the trade unions and in light of the very real constraints presented by limited resources (both financially and in terms of personnel) available. However the Respondent clearly has no objection in principle to research going ahead in this area. It is simply that in practice resources are limited and decisions about the organisation's priorities have to be made. Indeed Miss Manders was at the time of the hearing still pressing for research to be done on the hearing standard. As a result we do not regard this as a case where the employer has deliberately dragged its feet or is cynically hiding behind the absence of research to avoid its duties. It is simply that in an environment in which the consequences of an accident are so serious and where there is an industry standard which has widespread support, a cautious, evidence based approach to changing standard is a reasonable one to adopt. Without research relevant to the specific risks and operating environment the suggested adjustments are not reasonable.

Discrimination arising from disability

- 92. The only issue for determination in respect of this complaint was whether the Respondent can show that its treatment of the Claimant is a proportionate means of achieving a legitimate aim.
- 93. We had no doubt that protecting the health and safety of the Respondent's employees, and of rail passengers, is a legitimate aim, particularly in a safety critical enterprise like the railways. (Indeed the Claimant sensibly conceded the point). The question for us to consider is therefore whether applying the hearing standard is a proportionate means of achieving that aim. Miss Hart argued that it was not. She submitted that the risks associated with employing the Claimant as a lone track worker were fanciful and that the refusal to allow him to work in the MOM role with hearing aids was therefore not a proportionate response.
- 94. As explained above, we do not accept that the risks associated with employing the Claimant as a lone track worker can be regarded as slight, and we have concluded that the considerations dealt with when considering reasonable adjustments apply equally here and tip the balance in the Respondent's favour. Of these, we noted in particular that the Respondent operates a policy that differentiates between roles and applies different medical standards to different tasks or competencies. This means that an individual with a disability who fails to meet a particular standard can be allotted an alternative role with a less stringent medical fitness requirement, as happened in this case. In addition the MOM role is particularly dangerous, involving lone working on or near the line. This justifies a more stringent medical requirement. Given the fact that the standard adopted by the Respondent has been accepted as a benchmark for lone track working across the rail industry, that there is no research that would justify a dilution of that standard and the shortcomings of a track-side risk assessment we have concluded that the application of the standard is proportionate in all the circumstances of this particular case.

Employment Judge Milgate

Date 1 March 2017

RESERVED REASONS SENT TO THE PARTIES ON

07 March 2017

FOR THE TRIBUNAL OFFICE