

IN THE SOUTH LONDON CORONER'S COURT

BEFORE HER MAJESTY'S SENIOR CORONER SARAH ORMOND-WALSHE

IN THE MATTER OF THE INQUESTS TOUCHING THE DEATHS OF:

(1) DANE CHINNERY

(2) DONALD COLLETT

(3) ROBERT HUXLEY

(4) PHILIP LOGAN

(5) DOROTA RYNKIEWICZ

(6) PHILIP SEARY

(7) MARK SMITH

RULING ON FURTHER EVIDENCE

1. At about 06.07 hrs on Wednesday 9 November 2016 tram 2551, which was travelling between Lloyd Park and Sandilands tram stop on the Croydon tram network, derailed and overturned at a sharp bend in the track known as the Sandilands south curve. The driver of the tram was Alfred Dorris. The tram was carrying 69 passengers. It was raining heavily and it was dark. The maximum permitted speed for travelling around the Sandilands south curve was 20 kph. Tram 2551 was travelling at about 73 kph when it overturned. Dane Chinnery, Donald Collett, Robert Huxley, Philip Logan, Dorota Rynkiewicz, Philip Seary and Mark Smith were all passengers on the tram at the time. All seven were ejected from windows or doors of the tram as it overturned. Tragically all seven died instantly. Nineteen other passengers suffered serious injuries and a further 43 (including the driver) suffered minor physical injuries. Only one passenger suffered no physical injury at all. This catastrophic event was the worst accident to occur on a British tramway for more than 90 years.

The issue to be determined

2. These seven inquests commenced before me, sitting with a jury, on 17 May 2021. Having heard evidence over several weeks, primarily from the Rail Accident Investigation Branch ("RAIB") and British Transport Police ("BTP") investigators, the issue before me now is what further evidence, if any, the jury should hear before retiring to consider their conclusions. In particular, I must consider the effect of the judgments

given in *R (Secretary of State for Transport) v HM Senior Coroner for Norfolk* [2016] EWHC 2279 (Admin) (“the Norfolk case”).

The parties

3. Five of the seven families are represented by Andrew Ritchie QC and James Byrne (those of Mr Collett, Mr Logan, Mrs Rynkiewicz, Mr Seary and Mr Smith). Two of the families are represented by Giles Mooney QC (those of Mr Chinnery and Mr Huxley).
4. Interested Person (“IP”) status has also been granted to eight other parties:
 - (1) Tram Operations Limited (“TOL”), which operates the tram service and employs the tram drivers, is represented by Peter Skelton QC and Mike Atkins of counsel.
 - (2) Transport for London (“TfL”), which owns and is responsible for the Croydon tram network infrastructure, is represented by Keith Morton QC and Fiona Canby of counsel.
 - (3) Alfred Dorris, the driver of tram 2551, is represented by Miles Bennett of counsel.
 - (4) Bombardier Transportation UK Limited (“Bombardier”), which designed, manufactured and supplied the tram involved in the derailment, is represented by Oliver Powell of counsel.
 - (5) BTP, which is responsible for policing Britain’s rail and tramways, is represented by George Thomas of counsel.
 - (6) The London Fire Brigade (“LFB”) is represented by Sarah Le Fevre of counsel.
 - (7) RAIB, which is the independent accident investigation body with statutory responsibility to investigate accidents on Britain’s rail and tramways (discussed more fully below), is represented by David Manknell of counsel.
 - (8) The Office of Rail and Road (“ORR”), the safety regulator for Britain’s rail and tramway systems, is represented by Jonathan Ashley-Norman QC and Bo-Eun Jung of counsel.
 - (9) London Travel Watch is the official ‘watchdog’ which represents the interests of transport users in and around London is represented by Mr John Cartledge.
5. In addition, I have appointed counsel to the inquests (“CTI”), Richard Furniss, Scott Matthewson and Jamie Fireman.

The Norfolk case

6. The issue in the Norfolk case was whether a coroner had the power under the Coroners and Justice Act 2009 (“the 2009 Act”) to (a) order the Air Accidents Investigation Branch to disclose a cockpit voice and flight data recorder (and/or a full transcript of that voice recordings); and (b) impose a fine for non-compliance with those orders.
7. Mr Justice Singh (as he then was) decided that a coroner had no such power and that an order of the High Court is required before such disclosure can be made. He went on to say:

49. *Finally, in my view, it is important to emphasise that there is no public interest in having unnecessary duplication of investigations or inquiries. The AAIB fulfils an important function in that it is an independent body investigating matters which are within its expertise. I can see no good reason why Parliament should have intended to enact a legislative scheme which would have the effect of requiring or permitting the Coroner to go over the same ground again when she is not an expert in the field. The Coroner's functions are of obvious public importance in this country and have a long pedigree. In recent times they have to some extent been extended, as Ms Hewitt has reminded this Court, in order to ensure compliance with the procedural obligations which may be imposed on the state by Article 2 of the Convention rights. However, none of that, in my view, points to, still less requires, an interpretation of Sch. 5 to the 2009 Act which would have the effect for which Ms Hewitt contends. On the Secretary of State's interpretation, there will still remain the possibility of disclosure being ordered – but that disclosure can only be ordered by the High Court, which must weigh the different public interests in the balance, as required by Regulation 18 of the 1996 Regulations.*

8. The then Lord Chief Justice of England and Wales, Lord Thomas, agreed with the decision and added:

55. *I consider it important to underline the significance of paragraph 49 of the judgment of Singh J in the light of the submission made to us on behalf of the coroner that she had a duty to conduct a full inquiry into the accident as a death had occurred during the accident. The submission reflected the tendency in recent years for different independent bodies, which have overlapping jurisdictions to investigate accidents or other matters, to investigate, either successively or at the same time, the same matter. On occasions each body considers that it should itself investigate the entirety of the matter rather than rely on the conclusion of the body with the greatest expertise in a particular area within the matter being investigated. The result can be that very significant sums of money and other precious resources are expended unnecessarily.*

56. *The circumstances of the present case provide an illustration of what in many cases will be the better approach. There can be little doubt but that the AAIB, as an independent state entity, has the greatest expertise in determining the cause of an aircraft crash. In the absence of credible evidence that the investigation into an accident is incomplete, flawed or deficient, a Coroner conducting an inquest into a death which occurred in an aircraft accident, should not consider it necessary to investigate again the matters covered or to be covered by the independent investigation of the AAIB. The Inquest can either be adjourned pending the publication of the AAIB report (as the Memorandum of Understanding between the Coroners Society and the AAIB and others dated May 2013 (MoU) suggests) or proceed on the*

assumption that the reasons for the crash will be determined by that report and the issue treated as outside the scope of the Inquest.

57. *It should not, in such circumstances, be necessary for a coroner to investigate the matter de novo. The coroner would comply sufficiently with the duties of the coroner by treating the findings and conclusions of the report of the independent body as the evidence as to the cause of the accident. There may be occasions where the AAIB inspector will be asked to give some short supplementary evidence: see, for example, Roger v Hoyle [2015] QB 265 at paragraph 94. However, where there is no credible evidence that the investigation is incomplete, flawed or deficient, the findings and conclusions should not be reopened. It is clear that the terms of the Coroners (Inquests) Rules 2013 require some further elucidation to set out clearer provisions to deal with these issues; no doubt the Chief Coroner can in conjunction with the Coroners' Society and other interested parties consider what is necessary. It would also be desirable for the Chief Coroner to reconsider the terms of the MoU with the AAIB in the light of the judgments in this case and for the future be responsible for the guidance and arrangements contained within the MoU.*

RAIB

9. It is necessary to discuss RAIB in a little more detail in order to put its role in these inquests in its proper context. RAIB is the independent organisation which has the statutory responsibility to investigate any serious railway accident in the UK and was established by The Railways and Transport Safety Act 2003. The creation of RAIB was the government's response to a recommendation of the Public Inquiry into the collision of two trains at Ladbroke Grove in 1999. It also met a requirement of the EU Railway Safety Directive 2004/49/EC that such a body be established by all member states.
10. The Railways (Accident Investigation and Reporting) Regulations 2005 (SI 2005/1992) provide the legislative framework needed to enable the operation of RAIB by defining the obligations of duty holders and all other involved parties, including statutory bodies. The scope of the Regulations includes the notification of accidents and incidents, the duty of cooperation, the management of evidence and the processes to be followed when publishing reports and recommendations.
11. RAIB is a stand-alone branch of the Department for Transport ("DfT"). Although RAIB is technically part of the DfT, it is independent of government. RAIB's role is defined by The Railways and Transport Safety Act 2003 ("the 2003 Act"), EU Directive 2004/49/EC ("EU 2004/49") and The Railways (Accident Investigation and Reporting) Regulations 2005 ("the 2005 Regulations"). Recital 23 of EU 2004/49 states:

Serious accidents on the railways are rare. However, they can have disastrous consequences and raise concern among the public about the safety performance of the railway system. All such accidents should, therefore, be investigated from a safety perspective to avoid recurrence and the results of the investigations should be made public ...

12. The RAIB's Report is prepared for a specific purpose, and the investigation is carried out in accordance with the 2005 Regulations and EU 2004/49. RAIB is required to aim to improve the safety of railways, and to prevent railway accidents and railway incidents – section 4 of the 2003 Act. When investigating an accident or incident RAIB must try to determine what caused it – section 7(3) of the 2003 Act. Schedule 6 to the 2005 Regulations sets out the principal content of an RAIB accident and investigation report.
13. In performing a function in relation to an accident or incident, RAIB must not consider or determine blame or liability. It may however determine and report on a cause of an accident or incident whether or not blame or liability is likely to be inferred from that determination or report – section 7(5) of the 2003 Act. Where a shortcoming is established by the RAIB's investigation, but cannot be evidenced to be causal, RAIB may make observations on the shortcoming in its report - Schedule 6(4) of the 2005 Regulations.
14. By virtue of Regulation 12 of the 2005 Regulations, RAIB shall make recommendations contained in a report to the safety authority (ORR in this instance) or such other public body or authority as it considers appropriate, and such bodies must ensure that the recommendation is duly taken into consideration and acted upon where appropriate.
15. In terms of the role of RAIB, and the scope of its investigations, there is no material difference between the role of RAIB or that of AAIB in respect of air accidents, and MAIB in respect of marine accidents. All three accident branches are, within their respective fields, the independent and expert bodies which are in the UK responsible for the investigation of the causes of rail, air or marine accidents, and with ensuring that appropriate safety recommendations are made to prevent future accidents occurring.
16. It is an important part of RAIB's process that investigations into a rail accident are carried out with openness and transparency, in keeping with its responsibility as the UK's rail accident investigator. That principle is specifically included in EU 2004/49, which provides at Article 22.3 that:

The investigation shall be carried out with as much openness as possible, so that all parties can be heard and can share the results. The relevant infrastructure manager and railway undertakings, the safety authority, victims and their relatives, owners of damaged property, manufacturers, the emergency services involved and representatives of staff and users shall be regularly informed of the investigation and its progress and, as far as practicable, shall be given an opportunity to submit their opinions and views to the investigation and be allowed to comment on the information in draft reports.

The relevant procedural background

17. These inquests were opened on 21 November 2016 and adjourned to enable the BTP to investigate and for the Crown Prosecution Service to decide whether or not any criminal proceedings should be brought. On 31 October 2019 the CPS announced that no criminal prosecutions would be pursued.

18. I held a total of six Pre-Inquest Review Hearings (“PIRHs”) between 2019 and 2021 and following each one I made various rulings and gave directions.
19. On 29 January 2020 I determined that, whether or not Article 2 of the European Convention on Human Rights (“Article 2”) was engaged, the investigations would be sufficient to comply with Article 2 and that, accordingly, section 5(2) of the Coroners and Justice Act 2009 (“CJA 2009”) would apply. The question as to whether Article 2 was engaged would be kept under review throughout the course of the inquests. Appended to those directions was a list prepared by CTI setting out the scope of the inquests, with which the other IPs agree (or at least they have not challenged).
20. At PIRH 3 on 6 August 2020 Mr Furniss referred me to the *Norfolk* case and made the following submission:

Clearly, the RAIB...has investigated and reported in great detail on the causes of this accident and it will be the evidence of the RAIB's witnesses which will cover and elucidate the causes of the accident. Other witnesses who would deal with matters already investigated by the RAIB should be called only if their evidence will either supplement the RAIB's evidence because the RAIB's evidence is for some reason incomplete, or – we have not seen anything of this so far – if it challenges some aspect of the RAIB's conclusions. [Transcript, 6 August 2020, pp. 4-5].

21. On behalf of the two families Mr Mooney QC said, “I agree entirely with what [Mr Furniss] has to say in relation to witnesses supplementing the RAIB Report and the guidance given in the *Norfolk* case.” On the subject of the *Norfolk* case Mr Byrne on behalf of the five families said: “In terms of the submissions that my learned friend has already made, I stand hand in glove in respect of those...” All other IPs agreed.
22. In paragraph 9 of their written submissions dated 28 August 2020 Mr Richie QC and Mr Byrne stated as follows:

*At §§6-7 of the 19 August 2020 ruling, HMC has set out both the relevant dicta of Chief Justice Lord Thomas in the case of *Norfolk* [2016] EWHC 2279 (Admin) and her determination that the inquest must not focus unnecessarily on grounds properly covered by the RAIB Report, or explore evidence which is in all the circumstances extraneous. We agree.*

23. In my directions that followed PIRH 3, dated 30 September 2020, I stated as follows:

*(1) I am grateful to all IPs for their helpful submissions on witnesses. As is agreed, the *Norfolk* case, which has been discussed at length, requires me to accept the investigation and findings of the RAIB, unless (and only to the extent that) it is incomplete, flawed or deficient. I should say that this would have been my approach even in the absence of the *Norfolk* decision.*

(2) I will therefore proceed as follows. Initially, I will invite family members to provide pen portraits of their deceased loved ones...

- (3) *I will then ask my counsel to read any necessary medical evidence to deal with the cause of death of each of the deceased...*
- (4) *I will then ask my counsel to read Mr Dorris's evidence. I am aware of the families' discontent that he is not fit to give evidence, but I am also aware that they accept Dr Alcock's opinion that he is not.*
- (5) *I will then call Mr Simon French, the Chief Inspector at the RAIB, to give an overview of the RAIB investigation, findings, and recommendations.*
- (6) *I will then call from BTP Supt Horton to give evidence of BTP's operational response, and then Det Supt Gary Richardson to give evidence of the investigation into the accident...*
- (7) *I will then proceed to hear specific expert evidence from the four further RAIB inspectors: Richard Harrington, Dominique Louis, Richard Brown and Mark Young.*
- (8) *That may be sufficient. However, in light of the families' submissions, I keep an open mind.*

- 24. After that first stage, I intended to consider whether the *Norfolk* threshold had been reached or not (i.e. whether there was credible evidence at the RAIB investigation was incomplete, flawed or deficient).
- 25. At PIRH 5 on 28 January 2021 Mr Ritchie QC accepted my proposal to hear the evidence in that way so as to comply with the guidance set out in the *Norfolk* case, but he urged me to call three additional witnesses as part of the first stage, namely (i) Jim Snowden, chief engineer at Tramtrack Croydon Ltd (a predecessor of TfL) who gave evidence to the ORR that was not available to RAIB when it carried out its investigation; (ii) Joshua Gordon, an expert instructed by the ORR to analyse risk assessments carried out by the operators of the Croydon Tram network, and (iii) Dr Roland Hill, an expert instructed by the five families to consider the causes of the Sandilands disaster.
- 26. Mr Manknell, on behalf of RAIB, submitted that by calling the very evidence that Singh J and Lord Thomas CJ in *Norfolk* sought to avoid in order to decide whether the RAIB Report was incomplete, flawed or deficient, defeated the purpose of that guidance. Rather, IPs could put potential criticisms to the RAIB witnesses (informed by other expert reports if appropriate) in the first stage of the evidence. Mr Skelton QC, for TOL, and Mr Thomas, for BTP, agreed.
- 27. On 1 February 2021 I made the following directions:
 - 8. *The one bone of contention is the suggestion by Mr Ritchie QC that the evidence of Mr Hill and Mr Gordon, and of Mr Snowden, should be heard with that of the RAIB witnesses and before submissions about further evidence.*

9. *In respect of Mr Hill and Mr Gordon, I accept the submissions of Mr Manknell, Mr Skelton QC and Mr Thomas. The views of Mr Hill and Mr Gordon will no doubt be put to the RAIB witnesses; if the RAIB witnesses cannot answer satisfactorily, that may be a compelling point for Mr Ritchie QC to make in his submissions. Actually to call Mr Hill and Mr Gordon would defeat the principle of the Norfolk case. I do not propose to call them prior to the submissions.*

10. *The evidence of Mr Snowdon, however, falls into a different category. His statement raises an issue of which the RAIB was not aware when its report was produced. I intend to have him called at the same time as the RAIB witnesses. The relevant RAIB witness can respond to Mr Snowdon and we will then decide whether further evidence is required.*

28. Before PIRH 6 I received written submissions dated 19 April 2021 from Mr Ritchie QC and Mr Byrne to the effect that the proposed approach, with which they had previously agreed, was "...flawed and should be abandoned." It was further submitted that the *Norfolk* case was a first instance decision [para 34] and that the comments relied upon are *obiter dicta* which "...have neither been affirmed or considered in any reported case or by an appellate court" [para 39].

29. Mr Richie QC explained that a key reason for this submission was that "...RAIB are not permitted to give expert evidence. The IPs are not permitted to put questions to elicit expert opinions from RAIB witnesses or to put the expert views of Drs. Gordon, Hill, Dickinson and Stone to RAIB witnesses and they are not permitted to answer giving opinions as experts" [para 2]. Reliance was placed on a Memorandum of Understanding ("MoU") made between the Chief Coroner and RAIB and other Accident Investigation Branches ("AIBs") in October 2017, which states as follows:

AIB attendance at an inquest

20. *The normal function of an AIB inspector at a coroner's inquest is to substantiate only the factual findings of the AIB's safety investigation. To facilitate understanding, they may also provide technical explanations of the material included in the AIB report. They will also answer questions on factual matters contained in the AIB's report...*

21. *AIB inspectors are prohibited by regulation from attributing blame or liability and so do not act as expert witnesses as this may draw them into speculation. Coroners, therefore, should not invite AIB inspectors to provide any opinions, as this could give the impression that they were apportioning blame or liability.*

30. Mr Mooney QC essentially agreed with this in his written note dated 26 April 2021. None of the other IPs shared the families' view (although there was disagreement

between IPs as to whether paras 49 and 55 – 57 of the *Norfolk* case formed part of the *ratio decidendi* of the case or constituted *obiter dicta*).

31. On 6 May 2021 I made the following rulings:

2. *In my rulings of 30 September 2020 and 1 February 2021 I indicated that I intend to hear evidence initially from the RAIB inspectors and BTP witnesses, along with the evidence of Mr Jim Snowden...before hearing submissions on what further evidence it is necessary for me to call in order to satisfy the requirements of section 5 of the Coroners and Justice Act 2009. I listed a significant number of additional witnesses who may be required to give evidence – all of whom have been or are in the process of being warned. I have not yet made any decision as to which additional witnesses I will call.*
3. *As all IPs are aware, I have been mindful of the guidance set out in the case of R (Secretary of State for Transport) v HM Senior Coroner for Norfolk [2016] EWHC 2279 (Admin) ... The relevant passages clearly encourage coroners to avoid unnecessarily re-investigating matters which have previously been investigated and reported on by a relevant Accident Investigation Branch... If, however, there is a credible reason to believe that an AIB's investigation is incomplete, deficient or flawed, then it is my duty in these inquests to investigate further.*
4. *The Five Families have highlighted the Memorandum of Understanding ("MoU") dated 23 October 2017, which exists between the Chief Coroner and the Chief Inspectors of the three AIBs (including Mr Simon French of the RAIB). The families reference paragraphs 20 and 21 of the MoU ...*
5. *The Five Families, now supported by representatives of the Two Families... rely on the above paragraphs of the MoU in support of their submission that RAIB inspectors are not entitled to provide expert opinion evidence at inquests, so that therefore all witnesses who have been warned should give evidence to these inquests. It is submitted that the other experts who have been warned must be called because the RAIB inspectors are said to be permitted to give evidence only on factual points and provide explanations on technical issues, rather than providing expert opinions.*
6. *Whilst the wording of the MoU may be imprecise and unfortunate, I am convinced that, in their proper context, the words do not prevent or even discourage the RAIB from providing expert analysis and conclusions to these inquests.*
7. *The Norfolk case itself makes it clear that the AIBs are the bodies which hold the 'greatest expertise' when it comes to determining the causes of an accident in their respective industries. It also confirms that treating the findings and conclusions of an AIB report as evidence as to the causes of an accident is likely to be appropriate in a coroner's inquest.*

8. *I intend to call the RAIB inspectors to give evidence on their investigation and to elaborate on their conclusions as to the causes of the derailment at the centre of these inquests. In such circumstances, and as several IPs have acknowledged, there will inevitably be substantial crossover between the factual and technical explanations of the causes of the derailment and expressions of opinion based on expert analysis of the evidence the inspectors identified.*
9. *Equally, and as Mr Manknell submitted, preventing the RAIB Inspectors, who I am mindful have the 'greatest expertise' in this area, from giving opinion evidence would appear to deprive the court of accessing much of the relevant expert evidence available to it.*
10. *Read in context, the mischief which the MoU aims to avoid is that of the RAIB inspectors apportioning blame or liability in an inquest, or appearing to do so. That fits in both with (i) the RAIB's statutory regime, which expressly prohibits it from considering blame or liability when carrying out an investigation – section 7(5)(a) of the Railways and Transport Safety Act 2003; and (ii) the prohibition against the jury framing their Records of Inquests in such a way as to determine any question of criminal liability on the part of a named person or civil liability – section 10(2) of the Coroners and Justice Act 2009. The true meaning of the MoU is to ensure that neither the RAIB or the jury are encouraged to stray beyond these important statutory limitations.*
11. *Broadly speaking, then, I accept the submissions in particular of Mr Manknell, Mr Skelton QC, Mr Ashley-Norman QC and counsel to the inquest. The MoU was not intended to restrict the scope of the evidence which the RAIB can give to these inquests, save to the limited extent described above. I would add that it is entirely usual in inquests for the various AIBs to provide expert evidence, as I propose to invite the RAIB to do here. The fact that this is common practice and, as far as I am aware, has never previously been challenged, gives me further comfort as to the true intention of the MoU. In conclusion, therefore, I do not propose to confirm formally at this stage that all the potentially relevant witnesses must be called or to ask for their evidence prior to that of the RAIB inspectors.*
12. *As I indicated previously, relevant questions will be put to the RAIB inspectors during their evidence and their conclusions will be tested and explored. Once I have heard from them, the BTP witnesses and from Mr Snowdon, I will hear submissions from all IPs. I will then be in the best position to assess what further evidence I need to hear.*
13. *I emphasise again that at no stage have I made any decision to restrict the witnesses who may be called. I may decide to call several or indeed all of the other witnesses listed. I do not, however, feel it is necessary for me to determine this now or to amend the general approach I set out in my previous rulings. I*

am satisfied that it is lawful and appropriate for me to approach the evidence in this way.

The evidence heard so far

32. I resumed the inquests before a jury on 17 May 2021. Once the jury had been sworn in and all preliminary matters had been dealt with, moving statements by members of the seven families were read to the jury. Brief evidence was given as to the medical cause of death in respect of each of the seven tram passengers who had lost their lives on 9 November 2016. We then moved on to RAIB evidence.
33. The RAIB investigation was enormously detailed. The investigation took 13 months to complete and then reduced to a single Report which was published in December 2017. Detailed though it was (running to 180 pages), the Report was, in fact, only a summary of more detailed investigations and analysis that took place during the investigation. Mr French and his inspectors explained in evidence how the analysis was carried out, how the conclusions were reached and what could usefully be learned from the investigation as to how to improve safety on tramways in future.
34. Over the course of four weeks, the jury then heard lengthy and extremely detailed evidence from six Inspectors at RAIB responsible for the investigation into the accident. The court heard from the Chief Inspector, Mr Simon French, for almost six days; Mr Richard Harrington for almost four days; Dr Mark Young for nearly two days; and also from Mr Louis, Mr Lewis and Mr Brown.
35. Mr French clearly has a vast amount of experience (perhaps unrivalled in the UK) in the investigation of tram accidents, although he sensibly deferred to other specialist inspectors within his team where appropriate. The RAIB evidence covered the origin and role of RAIB, the legislative background, the respective roles of the RAIB, BTP and ORR, the purpose of the RAIB investigation, the history of the Croydon tram system, the immediate cause of the derailment, the collection of evidence, the post-accident storage and testing of tram 2551, a detailed accident timeline, an animated video reconstruction of the accident both in slow motion and in real time, identification of causal factors (high level causes, causes linked to the actions of the driver, causes linked to risk management, causes linked to safety culture), injury causation, observations (ie, safety issues discovered but which were not causative), identification of underlying factors, factors affecting the severity of consequences, previous incidents on the Croydon tramway and previous incidents on other tramways. In addition, RAIB made 15 individual recommendations relating to risk awareness, additional control measures, tram crashworthiness, safety regulation, management and safety culture (including management of fatigue risk), improved CCTV and maintenance and testing documentation.
36. Mr Manknell described the questioning of Mr French and his investigators, particularly by those representing family members, as “uncompromising”. Nobody could reasonably disagree. But I would reject any suggestion – if any such suggestion were to be made or implied – that the questions put by Mr Ritchie QC or Mr Mooney QC have been in any way improper. On the contrary, each has asked relevant, focussed and challenging questions of the RAIB witnesses which I (and I am sure the jury) have

found extremely helpful. The families understandably have a large number of issues that they wished their barristers to explore. I have imposed no time limits in terms of questioning. I have not found it necessary to intervene as to the topics covered or (in any significant way) in respect of the manner in which questions have been asked. This has meant that the RAIB inspectors' evidence has been most thoroughly tested. After that testing, none of the RAIB witnesses has had reason to change his views, and all have confirmed that the conclusions of RAIB remain as set out in the Report.

37. In addition, the jury has also heard three days of evidence from BTP who carried out the criminal investigation independently of the RAIB investigation. That evidence covered emergency response, rescue efforts and evidence preservation from the Major Incident Tactical Commander in overall charge of the accident scene, Supt Christopher Horton. Det Supt Richardson carried out the subsequent BTP criminal investigation. The jury heard him give evidence as to the investigation strategy (track failure, tram failure, driver failure and organisational failure), victim identification, the tram driver and details of his actions in the week leading to the derailment (and, in particular, a detailed timeline of his actions and movements in the 24 hours before the disaster), examination of Mr Dorris's mobile phone, CCTV footage of his movements on 9 November 2016, the accounts of surviving passengers as to what happened and what was said and done by people after the derailment (in particular, by the driver), the views of other drivers and employees of TOL (as to driver training, the Sandilands curve and how to negotiate it, speed limits and braking, lighting inside and outside of the Sandilands tunnel, management culture at TOL and assessment of Alf Dorris's skill as a driver), evidence of historic incidents where tram drivers had allegedly fallen asleep or otherwise lost consciousness/concentration whilst driving and expert evidence as to sleep loss/deprivation.
38. In addition, a large quantity of documentary, photographic, diagrammatic, and video evidence has been shown to the jury. They also heard evidence from Jim Snowden and I permitted counsel to read into evidence all those parts of a report from the expert on fatigue, Dr Barbara Stone, as they felt relevant.
39. I have previously ruled that the tram driver, Alf Dorris, could not on medical grounds safely give evidence in court or remotely; and this was based upon cogent, up-to-date expert medical evidence. This was very unfortunate and was particularly hard on the families, who naturally wanted to hear his evidence and for him to answer questions. Whether and to what extent Mr Dorris would have answered certain questions given the protection afforded to him by Rule 22 of the Coroners (Inquests) Rules 2013 and the warnings that I would have given is unknown. However, the transcript of the detailed BTP interview with Mr Dorris, which was conducted on 20 September 2017 and which lasted more than two-and-a-half hours, was read to the jury in a slightly edited form agreed by all IPs.
40. Again, there was no restriction on the IPs as to the duration of questioning of the BTP witnesses or of Mr Snowden, the topics covered or the materials used during questioning. Det Supt Richardson confirmed that the BTP's conclusions, insofar as they covered the same issues at the RAIB investigation, did not differ from the RAIB conclusions in any significant respect.

41. I have placed no restriction on any advocate in terms of the material that they could use in questioning and testing the RAIB witnesses. IPs have put passages from a number witness statements (from witnesses who have not been called) to the RAIB and BTP witnesses. They have also been free to put any of the expert material to those witnesses. In short, there has been a lengthy, unlimited and robust examination of RAIB's evidence as to the accident and of its causes.

Submissions on the *Norfolk* case

42. Given the importance of the decision before me I invited all IPs to provide submissions in writing ('written submissions I'), an opportunity to file written submissions in reply ("written submissions II") and the chance to develop those arguments orally in court. Whilst I proposed deadlines for written submissions, I made it very clear that if any IP required more time then it would have been granted. I heard oral submissions on 24 June 2001 and placed no time restriction on any party.
43. I am extremely grateful to all IPs for the care, consideration and effort that has obviously gone into the preparation of these submissions.
44. With that in mind, I would like to deal, briefly, with a submission made by Mr Ritchie QC in his written and in oral submissions. He concluded his oral submissions with these remarks [Transcript, 24 June 2021, page 18]:

I close simply with this: there will now be many submissions from State-funded Interested Parties made behind me, only one being privately-funded as I understand it, that is TOL. All of those submissions will be, "Do not hear any more evidence" because TFL would not like to put their witnesses in the box and so would like you to interpret Norfolk to say they do not have to. TOL would not like to have their managers in the box because to have them in the box would expose them to public scrutiny. The ORR would not like to have their witness in the box because that would expose the Regulator to public scrutiny and RAIB would not like to have their witnesses criticised or that would reduce their status.

45. I do not accept that charge. Mr Morton QC put it in characteristically eloquent, moderate and cogent terms when he responded as follows [Transcript, 24 June 2021, pp. 30-31]:

...Transport for London does not seek, and has not sought at any stage, to avoid public scrutiny. We have made it clear to you throughout, and including in our most recent submissions, that TfL witnesses are ready and willing to give evidence if that is what you decide. Of course, as you know, TfL has provided very, very extensive disclosure and other material to you, the British Transport Police, and to the RAIB. I heard with regret, on behalf of my clients, the submission that the families feel Transport for London has sought to prevent evidence being given...But may I make it absolutely clear that is simply not correct. On the contrary, TfL has co-operated fully with all of the investigations that have taken place and continue to take place into this tragedy.

Furthermore, of course, TfL and others have been exposed to substantial public scrutiny in the course of these inquests, including extensive criticisms by the RAIB and robust questioning -- about which no complaint has been made or is made -- by my learned friends, Mr. Ritchie and Mr. Mooney. The issue now is what is the correct approach for you to take as a matter of law.

46. I accept this submission in its entirety. The same may be said of the other IPs specifically referred to by Mr Ritchie QC (TOL, ORR and RAIB). Whilst there have been what I would describe as the customary sort of disagreements between IPs as to how swiftly and enthusiastically disclosure has been provided in this case, I do not think that anyone could sensibly argue that full disclosure of all relevant documents has not been given. The extent of disclosure has, in truth, gone far beyond that which has been necessary to assist the jury with their conclusions in this case. I have detected no reluctance on the part of any of these organisations to face public scrutiny. TOL and TfL have fully cooperated with the BTP, the RAIB and the ORR on the evidence that I have seen. TOL, TfL, ORR and RAIB have, by their advocates, made it absolutely clear that they are ready and willing to provide any and all disclosure that I require. All have made it abundantly clear that they will do everything in their power to make their witnesses available if I so require them. I could not have asked or expected them to be more cooperative.
47. It is quite apparent to me that *every* IP in these inquests has made submissions to me, both in writing and orally, with the genuine intention of helping me arrive at the correct decision as a matter of law (rather than attempt to advance a 'case' or persuade me to make decisions only to suit their clients' interests). I am extremely grateful, but not at all surprised, for the way that members of the Bar have conducted themselves in this regard.
48. I turn now to the submissions made on behalf of the IPs.

The Five Families

49. The submissions of Mr Ritchie QC and Mr Byrne are contained in their two written submissions dated 17 June and 22 June respectively and Mr Ritchie's oral submissions on 24 June 2021 (with his document showing a sentence from paragraph 56 the *Norfolk* case, paras 20 and 21 from the MoU and a diagram relating to the differences between the jurisdiction of the jury, on the one hand, and RAIB's remit, on the other).
50. I have read and listened to the five families' submissions very carefully. The following is necessarily only a brief summary of those arguments (for the full effect and nuance of the arguments advanced, the written and oral submissions should be referred to):
- (1) Only the jury can determine the facts and discharge the state's Article 2 procedural obligation to investigate deaths of those in the care of the state; the RAIB should not be allowed usurp that function [written submissions I, para 2].
 - (2) The Article 6 right to a fair trial weighs heavily towards IPs questioning source witnesses for the jury to hear and assess their evidence for their findings of fact [para 2].

- (3) The true meaning of the *Norfolk* guidance is to avoid re-investigation of technical matters where an AIB undoubtedly has the greatest expertise (but does not extend to factual matters about which the jury are perfectly capable of making their own findings) [paras 3&4].
- (4) The jury has been prevented from assessing the credibility of RAIB's opinions on knowledge and foreseeability and findings of fact because the source evidence upon which those are based cannot be revealed. Indeed, even RAIB witnesses conceded that the jury might reasonably come to a different view (and some of the RAIB witnesses factual assumptions were shown to be faulty under questioning) [paras 5-8].
- (5) A number of central issues that the jury have to decide fall outside the *Norfolk* 'expert evidence exclusivity ring' such as (i) knowledge of risks, hazards, consequences and causation, (ii) foreseeability of the risks arising from drivers sleeping/losing awareness/fatigue, (iii) what happened to Mr Dorris in the 1,134 metres before the tram derailed, (iv) speed sign placement/overspeed alarms and automatic braking, (v) speed and sleeping control measures, (vi) culture and safety learning, (vii) risk assessment defects, and (viii) ORR failures [para 9].
- (6) RAIB witnesses, by their own admission, could not assist the jury by giving an opinion on the severity of TOL/TfL failings, which means that critical evidence which might enable the jury properly to consider a conclusion of unlawful killing is absent [paras 10-13].
- (7) RAIB has intentionally used confusing terminology which has been unhelpful to the jury [para 14].
- (8) RAIB witnesses have refused to be logical (by refusing to change their opinions when faced with reasonable challenges) [para 15].
- (9) RAIB gives its own report undue deference when, in truth, their conclusions on non-technical matters are merely based on their interpretations of the credibility of the source evidence. The jury are perfectly able to assess these things for themselves (and come to different conclusions) [paras 15-16].
- (10) It is wrong to force the jury to rely on hearsay evidence given by BTP witnesses when first-hand evidence is available [para 17].
- (11) The *Norfolk* guidance constitutes *obiter dicta* on issues that were not fully argued or explored and should therefore be treated with caution; bodies which might have wanted to make submissions (inquest victims groups, PIBA and APIL) were not there to make representations; the guidance is at odds with the MoU which was agreed post-*Norfolk* (and *Norfolk* failed to consider a number of important factors) [paras 18-20].
- (12) RAIB is not omniscient and the jury are free to reject its evidence; RAIB has been oversensitive to challenges to its report (and its evidence is tainted by attempts to defend their conclusions rather than grapple with the challenges made); the bar set by *Norfolk* in relation to calling further evidence is low - others have different views and the jury should be permitted to hear them and make their own minds up [para 22].
- (13) There are flaws in the RAIB Report, including its failure fully to investigate why Mr Dorris did not look at the VECOM or Eric + display; only other TOL drivers (who could give evidence about the use of these devices) can assist on this point [paras 23-25].

- (14) For these reasons set out above, a number of specified further witnesses should be called and Mr Ritchie QC and Mr Byrne set out reasons why for each [para 26].
- (15) The second written submission by the five families dated 20 June 2021 contains a detailed critique of the written submissions made by CTI dated 20 June 2021 (which I will deal with more fully below).
- (16) Norfolk was not an Article 2 case and so it had a different scope [paras 1.1 & 2.3].
- (17) The obiter dicta in *Norfolk* have a narrower scope than suggested by CTI and apply only to the technical aspects of the report and not its findings of fact [written submissions II, para 2.1].
- (18) The fact that Lord Thomas CJ in *Norfolk* suggested that a coroner could properly hear an inquest where an AIB had yet to determine the ‘reasons’ for an accident supports the five families’ interpretation of the law [para 2.2].
- (19) CTI’s submissions are illogical, unfair to the families and in breach of their Article 2 and Article 6 rights. If correct, it would make RAIB the arbiters of all facts; render the inquest process irrelevant; usurp the function of the jury; take away the families’ right to a fair trial; make a charade of the challenges to RAIB and the submissions on further evidence (because it is RAIB which give permission for further witness evidence); and hide the actions of managers and staff from public scrutiny which is not in the public interest and will lead to suspicions of wrong doing being covered up [para 2.6].
- (20) The approach recommended by CTI means that RAIB is the sole arbiter of all facts both technical and non-technical, unless they themselves admit an error. It would mean that RAIB determines what evidence is “credible evidence” not HMSC or the Jury [para 2.7].
- (21) If CTI are correct, no organisation is to be held to account for their actions through questioning of their directors or senior staff before the families and the public. All wrongdoers will be hidden from view and this is contrary to the interest of justice and the House of Lords’ express rulings in *Amin* and *Middleton*.

The Two Families

51. Helpfully, the five families and the two families have coordinated their submissions so as to avoid unnecessary duplication. Mr Mooney QC supports the submissions summarised above and make the following additional points (again, this is my summary):
 - (1) The Lord Chief Justice’s formulation that there must be “credible evidence” that the RAIB investigation was “incomplete, flawed or deficient” has had the unwelcome consequence of causing RAIB to adopt a highly defensive and protective approach to its investigation and report [written submissions I, para 3].
 - (2) There is no need to begin an investigation “de novo”. The two families accept and agree with the vast majority of the RAIB Report, but there are areas where further evidence is required [para 5].
 - (3) Further evidence is not only required where there is credible evidence that the RAIB Report is incomplete, flawed or deficient. There is a further category, namely where RAIB have made determinations of fact which are not based on

expertise (e.g., where they have chosen to believe or disbelieve a witness). In these areas the RAIB have no monopoly of wisdom and a jury is a far preferable arbiter [para 6].

- (4) The proper approach before considering whether the RAIB Report is wanting in some way, is to ask (a) Is the opinion or judgment of the RAIB one that requires special expertise? (b) If not, could a properly directed jury reach a different conclusion on that matter? If the answers are ‘no’ and ‘yes’ respectively then the source evidence should be called so the jury can reach its own conclusion [para 9].
- (5) Issues where the jury could reach different factual conclusions to RAIB include: (a) Did Mr Dorris fall asleep and if so when did he wake up? Was the very short braking in the third tunnel a conscious act? Should Mr Dorris have been driving at full speed on the approach to the tunnels given the prevailing conditions? (d) Did Mr Dorris feel tired on the morning of 9.11.16? (e) Did the management of TOL understand the risks of derailing at speed? (f) What was the culture at TOL in relation to driver’s reporting problems? (g) Why did neither TfL nor TOL ever perform an adequate risk assessment?
- (6) RAIB findings which may have been incomplete, flawed or deficient include (a) the risk associated with excessive speed on curves was neither fully understood by the safety regulator nor adequately addressed by UK tramway designers, owners and operators; (b) LT and TOL did not recognise the actual level of risk associated with over speeding on a curve; (c) failing to realise that the problem was not that TOL did not know the risk associated with speeding on a curve, but that that TOL had no interest in doing anything about it (because TOL told RAIB that even if the 2005 Route Hazard Assessment had been performed properly no additional control measures would have been identified); (d) reporting of fatigue is not relevant to the accident because the driver did not believe that he was fatigued; (e) the failure to consider Mr Dorris’ driving prior to the tunnels save to state that he was driving within the speed limits [para 16].
- (7) In response to submissions by CTI the two families argue that, if correct, the process of these inquests has been deeply flawed from the outset and have removed any purpose to the Inquests and breached the families’ Article 6 Rights [written submissions II, para 2].
- (8) The mere fact that a reputable expert (in the case of Gordon and Stone instructed by the ORR) holds a different view to the RAIB is, on its own, credible evidence that the RAIB Report is flawed [para 4].
- (9) The process of calling the RAIB witnesses and allowing them to be questioned was a device to prevent any other evidence being called. Either the RAIB would declare themselves satisfied with their report which would, in CTI view, delegitimise any other view, or they would correct any issues (to the extent that the RAIB saw necessary) thus negating the need for any further evidence. This is a corruption of the *Norfolk* dicta which plainly envisaged circumstances when further evidence would be called [para 7].
- (10) Any consideration of “how and in what circumstances” must ask the question why was the obvious risk posed by a tram derailing at speed on a corner missed by these people whose job it was to consider safety? Only those involved in that process can answer that question and they must be called [para 8].
- (11) If no further evidence is to be called then either (a) the jury will be directed that they must accept RAIB’s conclusions (in which case inquests following AIB investigations are pointless), or (b) the jury will be left to reach their own

conclusions and, if they reject RAIB's findings, they will have no first-hand evidence upon which to base their findings. Further evidence on factual issues is therefore required [paras 9-13].

BTP

52. BTP adopts a neutral stance but, in order to assist me, Mr Thomas has made a number of helpful submissions both in writing and orally. It is not necessary to go into the detail of those submissions (the subject matter of which I will discuss more fully below) but, in summary, BTP suggest that, in order for there to be a sufficient inquiry, witnesses should be called if (a) they are in a position to give relevant evidence that has not yet been adduced, or (b) they will give evidence that is contrary, additional or substantially different to that which has already been adduced on the relevant issues. This approach, he says, is entirely consistent with the principles in *Norfolk*; for example, the jury should hear from:
- (1) Appropriately qualified expert who expresses a different view from RAIB because "...it would be wrong to allow the jury to hear from only one professional opinion where the Coroner is aware that there is actually a range of professional opinion. It will of course then be for the jury to decide whose opinion they prefer"; and
 - (2) Factual witnesses whose evidence has been summarised by Det Supt Richardson "...so that their evidence can be better or more fully understood, or in order for that evidence to be challenged. It might be suggested it is necessary to call a further witness whose evidence contradicts the first" [written submissions I, para 5].
53. In his second written submissions Mr Thomas submits that a blanket decision cannot be taken in this case that there should be no further evidence (other than in relation to the prevention of future deaths) in the absence of credible evidence that RAIB's investigation is incomplete, flawed or deficient. He argues that "...the Coroner does need to consider each of the witnesses proposed by an interested party, and to ask herself whether – applying the principles set out in *Norfolk* – that witness is in a position to give relevant evidence to the jury, the substance of which has not yet been fully adduced on an issue that the jury will be required to determine" [written submissions II, para 4].
54. Mr Thomas goes on to say that the "...‘incomplete, flawed or deficient’ test is not an ‘all or nothing’ assessment. No interested party is suggesting that, were the RAIB Report to be deficient in one respect, fresh evidence must be allowed on all aspects of the inquests. For example, no one is suggesting that, were the RAIB Report to be incomplete in relation to risk assessment, additional evidence would need to be heard as to crashworthiness...It must also be the case that a party need not demonstrate credible evidence that the entirety of the RAIB investigation is incomplete, flawed or deficient before the decision can be taken to admit additional evidence in respect of one aspect of it" [paras 4(a) & (b)].
55. Mr Thomas also sets out a number of submissions in relation to specific witnesses, which I will deal with below.

Other IPs & CTI

56. There was broad consensus amongst the other IPs and CTI that the principles in *Norfolk* were either binding upon me or *obiter dicta* that should be followed and that no further witnesses are required (save for evidence relating to my Regulation 28 duties). I have considered all written and oral submissions carefully. I will not reproduce them here but, rather, I will refer to particular submissions where there is a material disagreement or where I think it is otherwise relevant for the purpose of making my decision.

Discussion

57. My primary thoughts and sympathies throughout these inquests have been, and will continue to be, with the families of the deceased. I understand their frustration that they will not have the opportunity to hear directly from Mr Dorris about what happened on 9 November 2016. I understand that they wish to see their barristers questioning senior managers directly and that they may feel, if that does not happen, that “wrongdoers will be hidden from view” and avoid public scrutiny (to borrow Mr Ritchie QC’s phrase) [written submissions II, para 2.9].
58. However much sympathy I have with those views, I have to remind myself of the purpose of these inquests, and the limits that the law imposes on me.
59. The purpose of these Article 2 investigations is to ascertain (a) who the deceased were, (b) how, by what means, when, where and in what circumstances they came by their deaths, and (c) the particulars required by the Registration Act 1953. There is a statutory prohibition on both me and the jury from expressing any opinion on any other matter – section 5, 2009 Act.
60. Mr Ritchie QC expresses the purpose of these inquests in wider terms. He submits that, if I were to accede to the argument that no further evidence should be called, that would constitute a breach of the families’ Article 6 rights and take away their “right to a fair trial” [written submissions II, para 2.6].
61. But this not a trial of alleged wrongdoers. As Mr Bennett reminds us: “This is an inquest. It is neither a civil or a criminal trial. The potential apportionment of blame by any IP is unhelpful. More importantly, it is not permitted” [written submissions II, para 1]. Rather, this is an investigation which will lead to a jury ascertaining the matters set out in section 5 of the 2009 Act and may lead to me discharging my duty by making a report aimed at preventing future deaths.
62. Mr Mooney QC, on behalf of the two families, echoes Mr Richie QC’s submission when he says: “The interpretation of the Norfolk case urged by the RAIB is ... an affront to Article 6 in that the IPs are left unable to challenge or even know what evidence lies behind the RAIB conclusions...” [written submissions I, para 12].
63. Even a brief reading of Article 6 reveals it to be of absolutely no application to inquests and Mr Bennett kindly reproduced it in full within his written submissions II at para 8 with the relevant sections in bold.

64. As Mr Manknell submitted, attempts to refer to Article 6 in the context of an inquest have been given short shrift - see e.g. *R(Skelton) v Senior Coroner for West Sussex* [2020] EWHC 2813 (Admin); [2021] 2 W.L.R. 413 (joint judgment of Popplewell LJ and Jay J) at para 123:

There is no merit in Ms Lee's argument that Trigg's article 6 rights would be violated by any restrictive course. His "civil rights and obligations" are not in play in a coroner's inquest, and the article 6 protections which apply to criminal trials are clearly irrelevant...

65. Article 6 clearly has nothing at all to do with my jurisdiction. It seems to me that Mr Furniss correctly identifies the crux of the difference between the families' and the position the other parties', namely that the families do see these inquests as a trial (and have said so in written submissions).

66. I turn now to the case of *Norfolk*.

67. Is the guidance in *Norfolk* part of the *ratio decidendi* of the case or *obiter dicta*? There is no consensus amongst the IPs on this issue. Mr Manknell, on behalf of RAIB, argues (in paragraphs 23-26 of his written submissions dated 27 April 2021) that Singh J's analysis in paragraph 49 of *Norfolk* "...is a core part of his reasoning for the overall conclusion, and it is given further weight by Lord Thomas CJ's additional comments". Alternatively, he argues that, even if the comments were *obiter*, given the composition of the court "...the passages would in any event be of the most persuasive authority, and there would need to be compelling reasons to depart from them."

68. I have stated before, and I remain of the view, that whether or not the guidance in *Norfolk* is binding on me or very persuasive *obiter dicta* makes no practical difference in the context of this case and is therefore a sterile argument. Either it is binding on me or it is not, but if it is not I have in any event decided to follow it (and I will continue to do so) for reasons best encapsulated by Mr Skelton QC in oral argument when he submitted that the decision is highly persuasive for three reasons:

- (1) The fact that the two judges were explicitly seeking to provide general guidance to coroners for the use in future inquests. In other words this was not the type of case where one inferred applicable principles from the judgments; rather the judges were intentionally providing principles of general application.
- (2) The status of the High Court as the supervisory court for the coronial jurisdiction. In other words, it is that court's job to provide such guidance; and
- (3) The seniority of the two judges who sat as a Divisional Court in that case.

69. In my view the *Norfolk* case established the following principles:

- (1) The Accident Investigation Branches have the greatest expertise in determining the circumstances and causes of accidents in their respective sectors.
- (2) Parliament did not intend that a coroner should be required or permitted to go over the same ground when the coroner (and jury if there is one) are not experts in that field.
- (3) It is not in the public interest for there to be unnecessary duplication of investigations or inquiries.

- (4) In the absence of credible evidence that the investigation into an accident is incomplete, flawed, or deficient, a coroner conducting an inquest into the accident, should not consider it necessary to investigate again the matters covered by the independent investigation of the AIB.
- (5) A coroner will comply sufficiently with his or her duties by treating the findings and conclusions of the independent body as the evidence as to the cause of the accident.
- (6) Where there is no credible evidence that the investigation is incomplete, flawed, or deficient, the findings and conclusions should not be reopened.
70. How should the *Norfolk* principles be applied in an Article 2 inquest (the *Norfolk* was not an Article 2 inquest)?
71. The scope of these inquests must be determined by reference to section 5 of the 2009 Act and a coroner has a wide discretion in setting the precise scope of the Inquests – see the Chief Coroner’s Law Sheet No. 5, paras 3-8.
72. The question of whether Article 2 is engaged will usually have little if any bearing on the scope of an inquest, though it may, hypothetically, affect the issues that may be left to the jury and the way in which they may express their conclusions. In *R (Sreedharan) v HM Coroner for the County of Greater Manchester* [2020] EWHC 3581 (Admin), Hallett LJ, having cited *Amin* and *Middleton*, observed at para 18(vii) that:
- There is now in practice little difference between the Jamieson and Middleton type inquest as far as inquisitorial scope is concerned. The difference is likely to come only in the verdict and the findings.*
73. In the more recent case of *R (Grice) v HM Senior Coroner for Brighton and Hove* [2020] EWCA Civ 18, Garnham J noted at para 58 that:
- In all inquests, the coroner is accorded a broad range of judgment as to the scope of the inquiry: see R (Hambleton) v Coroner for the Birmingham Inquests (1973) [2019] 1 WLR 3417, [46]-[50]. A decision that the Article 2 procedural obligation is engaged will have little, if any, effect on the scope of inquiry or conduct of the hearing: R (Sreedharan) v Manchester City Coroner [2013] EWCA Civ 181, [18(vii)]. This is because any properly conducted inquest will consider the circumstances surrounding and events leading to death. The key effect of Article 2 engagement is upon conclusions at the inquest.*
74. Article 2 requires the state, in appropriate circumstances, to investigate the circumstances of fatal incidents. The important point here, to my mind, is that the coronial system is but one of several means by which the state discharges its general duty to have in place an adequate legal system to investigate certain deaths. In *Pearson v UK* (2012) 54 EHRR SE11, the Strasbourg Court held at para 71:
- ...the essential principle is that the key facts should be brought out for public scrutiny and that the procedures provide for effective accountability. It cannot be said, as the applicant suggested, that there should be one unified procedure satisfying all requirements: the aims of*

fact-finding and accountability may be carried out by or shared between several authorities, as long as the various procedures provide for the necessary safeguards in an accessible and effective manner...

75. As CTI point out, and I agree, in many cases, an inquest will be the only opportunity to fulfil the investigatory duty but, here, the Sandilands accident has now been the subject of multiple state investigations, including an independent expert investigation by the RAIB, criminal investigations by BTP and the ORR (both assisted by experts), as well as these inquests. Mr Skelton QC describes the degree of scrutiny as “exceptional”, and it is difficult to disagree.
76. Again, as CTI submit, I have permitted unlimited, robust and very close scrutiny of the RAIB investigation and conclusions. I have done so to enable them to be amplified or clarified and to find out whether there is credible evidence that they are incomplete, flawed or deficient. That has been the further purpose of these inquests. RAIB is an expert body, a professional body, and an independent body. If, under scrutiny in this court, it realised that it had made some sort of mistake, or had missed a point, or had changed its mind in the light of further evidence – or indeed even in the light of alternative opinions put by counsel – it would be under a professional obligation to say so. None of the inspectors has done so.
77. Counsel for the families imply, and indeed come close to saying explicitly, that the fact they have not done so means they are giving evidence to this court, on oath, in bad faith.
78. If there was a proper basis on which such a finding could be made, then I would not hesitate to do so in appropriate circumstances. But there is, in my judgment, no proper basis on which I could make such a finding in these inquests.
79. If, despite RAIB’s evidence, I formed the view that their investigation was incomplete, flawed, or deficient I would have no hesitation in making that finding and calling additional witness evidence as necessary. But such a decision would have to be based on proper evidence.
80. Is the *Norfolk* guidance restricted to AIB findings and conclusions of an expert or technical nature? This is a central theme of the families’ argument. They argue that matters of fact are for the jury alone to decide and so it must follow that the jury should hear the underlying factual evidence for themselves so that they can make their own findings (whether they coincide with or contradict the RAIB conclusions).
81. I consider that submission misunderstands the true underlying meaning of the *Norfolk* case, which is that an AIB investigation will normally discharge the state’s Article 2 investigative obligation. The whole point of the guidance in *Norfolk*, whether I like it or not, is that absent credible evidence that an independent AIB investigation is incomplete, flawed or deficient, the findings and conclusions of that investigation are to be adopted.
82. I do not consider there is any support for the families’ approach in *Norfolk* itself. At para 57 Lord Thomas CJ simply says that “...where there is no credible evidence that the investigation is incomplete, flawed or deficient, the findings and conclusions should not be reopened.” The proposition that the findings and conclusions that must be

adopted are only those of a technical or expert nature is a gloss which does not appear in the guidance in *Norfolk*.

83. There is an additional and persuasive point that Mr Skelton QC makes, namely that such a distinction would not work in practice because “...there is no neat distinction between findings of a purely factual nature and those which involve some degree of expert interpretation, analysis or opinion. Nor is it easy to understand how a coroner or jury could accept the expert findings and conclusions of an AIB report whilst at the same time being free to reject the factual findings and conclusions that underpin them.”
84. In addition, the families’ approach overlooks the fact that an AIB is likely to have access to additional (and potentially better) evidence than may or may not be available at an inquest. As CTI have pointed out, we do not know (and we cannot know for sound legal reasons) how many witnesses were interviewed, or the precise extent of the source material that RAIB looked at. However, we do know that RAIB is able to compel witnesses to speak to them in circumstances where the police cannot. RAIB is not permitted to give details of any interview. Nonetheless, it must be overwhelmingly likely that RAIB spoke to the tram driver, and that what he said informed their conclusions. Of course, the only evidence from Mr Dorris which is available to this court is his 2017 BTP interview. The RAIB conclusions are likely to be based on better and fuller evidence than would be available to the inquests.
85. Finally, on this particular point, the families’ interpretation that only technical or expert matters may be adopted would require a coroner to reinvestigate matters with a jury in order to make findings of fact (even where there was no credible evidence that the AIB findings were incomplete, flawed or deficient) and even where the jury was likely to make precisely the same findings. This, it seems to me, would be contrary to the underlying rationale of *Norfolk*.
86. It follows from my analysis that, where a death arises from an accident which has been the subject of an AIB investigation, a coroner must:
- (1) Decide whether there is credible evidence that the AIB’s investigation was incomplete, flawed or deficient (and call evidence sufficient to make that determination).
 - (2) If not, no further evidence is required other than PFD evidence.
 - (3) If there is in the view of the coroner credible evidence that the AIB’s investigation is incomplete, flawed or deficient, the coroner should consider the question of further witnesses.
 - (4) If calling further evidence necessary to enable the jury to answer the statutory questions, evidence on those matters should be called.
87. Is there credible evidence that the RAIB investigation was incomplete, flawed or deficient?
88. As I preliminary point, I agree with and adopt the following submission made by Mr Manknell:

... there will not be credible evidence that the RAIB’s investigation is flawed, deficient or incomplete simply because a particular expert takes

a different view. In many investigations there will be difficult questions, and there may be a valid range of opinion on issues. The existence of contrary views does not demonstrate failures or inadequacies in the RAIB's investigation. In the event of diverging opinions by experts, the effect of Norfolk is to make clear that it is the statutorily-appointed expert's view (the AIB) that is to be preferred, absent credible evidence of deficiencies or flaws in the investigation. It is plain from paragraphs 49 and 55-57 of Norfolk that the Divisional Court did not intend for a lay jury in an inquest to be placed in a position of being required to choose whether they prefer the view of the relevant AIB, or of a particular expert put forward (for example) by an IP to the inquest.

89. With that in mind, I will now deal with each argument raised by the families (not already dealt with above) in turn. In doing so I should record my gratitude to Mr Ritchie QC, Mr Manknell and Mr Skelton QC for taking the time and trouble to analyse these issues comprehensively and in great detail. Other advocates, necessarily and for good reasons, confined themselves to matters which directly affected their own clients and I am also grateful for the care taken on each of those topics.

Accountability

90. The five families' starting point is that: "As was said in *Amin*, by Lord Bingham at §20(5) the coroner should call evidence from those involved "to ensure their accountability." In fact, Lord Bingham said no such thing. He referred to the essential purpose of the Article 2 investigation as having been defined in *Jordan v UK* (2001) 37 EHRR 52 in which it was said that where deaths involved state agents, the investigation must "ensure their accountability for deaths occurring under their responsibility". In the quoted paragraph 20(5), it is not suggested that any particular witness needs to be called. Indeed, in the next sentence it is stated that "... what form of investigation will achieve those purposes may vary in different circumstances". This is not a good point.

Comparing hearsay to source witnesses

91. The families (by which I mean the five families, with whom the two families have agreed) suggest the jury should be permitted to "...hear source evidence which is not hearsay..." and that on a number of issues the jury would be "...left with no power to determine the accuracy of the RAIB findings of fact...". To the extent that this suggests that the jury should undertake this task even where there is no credible evidence that those findings were incomplete, flawed or deficient, I cannot accept it because it offends an important part of the guidance in *Norfolk* that a coroner should not investigate the matter *de novo* in those circumstances.

Factual issues outside the scope of RAIB's expert exclusivity

92. It seems to me that I am being invited by the families to downgrade the status of RAIB to that of an expert like any other. I have already explained the legislative framework within which RAIB operates and the fact that its investigative team includes numerous experts, each with a particular expertise which he or she brings to bear on the investigation. There is also relevant case-law emphasising the deference that is to be accorded to organisations similar to RAIB with specialist expertise:

- (1) Mr Justice Dove in *Ross and Sanders (Acting on Behalf of Stop Stansted Expansion) v Secretary of State for Transport and others* [2020] EWHC 226 (Admin), noted: “...it is not the role of the court to embark on its own technical appraisal of the issues. The court must recognise and respect the expertise which has been brought to bear in reaching the decision, and appreciate that there may be more than one scientific view of an issue, as well as more than one way of modelling or forecasting an impact or effect....”.
- (2) In *Great North Eastern Railway Ltd v Office of Rail Regulation* [2006] EWHC 1942 (Admin) 27 Jul 2006, Sullivan J said: “Given the ORR's expertise in this highly technical field the Court would be very slow indeed to impugn the ORR's view...”.
- (3) Lord Justice May in *R (British Union for the Abolition of Vivisection) v SSHD* [2008] EWCA Civ said: “...the court must be careful not to substitute its own inexpert view of the science for a tenable expert opinion. ...In my view, absent material misconstruction, the court should be very slow to conclude that this expert and experienced Chief Inspector reached a perverse scientific conclusion...”.

93. In addition, I remind myself of the following. Firstly, the RAIB Report is only a summary of the investigation. The elements of the investigation which are required to be put into the Report are set out in Schedule 6 of the Railways (Accident Investigation and Reporting) Regulations 2005/1992. Among the purposes of the oral evidence of the Inspectors, given at these inquests, has been to explain matters within the investigation that may not be detailed in the Report. Secondly, there is a statutory bar, which protects RAIB from being required to disclose the opinion of an inspector which is unsubstantiated by evidence (except where the High Court orders RAIB to do so) as a result of Regulation 10(3)(b) of the 2005 Regulations. RAIB has been careful to ensure that the opinions contained in its Report and in these inquests, are backed by evidence and do not amount to speculation. Thirdly, RAIB also has the opportunity to look at matters in greater detail than is the case in this inquest. The investigation and Report were the product of full-time work by inspectors for a period of 13 months. As a result of its particular statutory regime (which is designed to ensure that the RAIB obtains full and frank evidence, given its role is to prevent future accidents) RAIB had access to a wider range of evidence in reaching its conclusions (including witness evidence) than is available to these inquests (or to BTP).
94. This effect of *Norfolk* is not simply to restrict what expert evidence, in addition to an AIB report, is required at an inquest. Singh J and Lord Thomas CJ were indicating who should bear responsibility for investigating the relevant issues in the first place. The case is concerned with the potential waste of public resources as a result of the investigation unnecessarily being carried out twice (or more) by separate investigative bodies. Where there is an AIB, their superior experience and expertise in investigating particular types of accident will normally mean that it is best placed to take on responsibility for the state investigation. This is hardly surprising not only because of the relevant AIB's greater technical or scientific expertise, but also because of (a) the time available for the investigation is far greater (in this case a number of RAIB investigators worked on the case full-time for 13 months), and (b) the AIBs' better

access to full and frank evidence, including witness evidence, given to them without fear of resulting criminal or civil liability, which is not available to an inquest.

95. Accordingly, it seems to me that the families' issues 1 – 7 under the heading 'Factual Issues outside the scope of the RAIB's expert exclusivity' are based on a faulty premise, namely that *Norfolk* was concerned with who should provide expert evidence in investigations of this kind (rather than its true purpose which was to indicate which official body should be responsible for the investigation into the causes of a transport accident). Accordingly, whether or not a particular topic is a 'factual' or and 'expert' issue is beside the point. In the absence of credible evidence that the investigation by RAIB was incomplete, flawed or deficient a coroner is not permitted to reinvestigate any of these issues.
96. By reference to the headings submitted by the five families and adopted by the two families, I will now explain why I do not accept that the RAIB investigation was incomplete, flawed or deficient and, in any event, why further evidence is unlikely to be of assistance to the jury.

Issue 1: Knowledge of risk/ hazards/ consequences and causation

97. It is suggested that the RAIB Report and the evidence given to the inquests are inconsistent with each other. The conclusion of the RAIB on this point is to be found in paragraph 195 of the RAIB Report, that "...LT and TOL did not recognise the actual level of risk associated with overspeeding on a curve." As Mr Manknell points out, it is important to note the way in which this phrased: it is not that the risk was completely unrecognised, but that the *level* of risk from such an incident was not recognised. As set out at paragraph 211, "...had the various risk assessments carried out between 2008 and 2015 recognised the level of risk associated with a tram overturning, it is likely that the need for additional mitigations, such as improved signage, would have been identified and found to be reasonably practicable to implement".
98. I understood Mr French's oral evidence to be that, as a matter of common sense, no-one on the tramway would have imagined that a tram could approach the curve at high speed without there being adverse consequences, including passenger injuries and the possibility of derailment. Indeed, the possibility of overspeeding leading to such outcomes was recognised in the tramway's risk assessments (RAIB Report paragraphs 208, 209 and 212). However, it is also true that the 'actual level of risk associated with overspeeding on a curve' was not recognised (RAIB Report para 195).
99. As CTI submitted: "It is important not to conflate what was foreseeable with what was foreseen. Catastrophic consequences were foreseeable. They were not foreseen."
100. I agree and take the view no credible evidence that the RAIB's investigation of these issues was incomplete, deficient or flawed, and no further evidence is required to reinvestigate these issues.

Issue 2: Foreseeability of the risks arising from drivers sleeping/losing awareness/fatigue

101. The families raise a number of issues relating to the foreseeability of the risks that arise from drivers sleeping or losing awareness through fatigue. It is suggested, that RAIB omitted to mention the Gibb Risk Assessments in their report and there is reference to the ‘8 red flags’ involving previous driver incidents and that the RAIB made no findings about TOL’s failure to list falling asleep or fatigue in their route hazard assessment.
102. In fact, RAIB was aware of the Gibb risk assessments during its investigation. As Mr French explained in his evidence, these risk assessments were produced to validate the design of the tramway and related to the design of signalling and the protection of single line sections of route.
103. Furthermore, TOL was aware of driver fatigue as an issue since it had processes in place to manage this risk (SM003 ‘Safety critical employees; RAIB Report paras 364 to 366). It had also identified overspeeding as a potential precursor to derailment in its risk assessments.
104. In respect of the “8 red flags”, most of these were known to RAIB and five are specifically mentioned in its Report. In three of these events there is substantive evidence that the driver had a microsleep. In only one of these three instances could RAIB find a possible link between fatigue and the duty hours that the drivers were working. The other incidents seem to relate to a loss of concentration. In none of these other incidents is it clear whether this was related to fatigue, distraction, low workload or some other factor.
105. RAIB’s evidence was there is no evidence that the number of fatigue related events is any higher than might be expected on any other tramway. Nevertheless, fatigue is always a risk factor which is why the RAIB has recommended that TOL reviews its fatigue risk management arrangements (recommendation 11). It has also recommended research into a way of reliably detecting a loss of awareness (recommendation 4) and the installation of an automatic braking system to intervene in case of overspeeding (recommendation 5).
106. It is therefore incorrect to suggest that RAIB did not investigate these matters: it plainly did and I reject the suggestion that this meets the *Norfolk* threshold.

Issue 3: Mr Dorris’ evidence to the RAIB and other evidence

107. It is said by the families that RAIB may have left out relevant evidence where it does not support their conclusions, or overlooked evidence or rejected evidence for that reason. There is no evidence to support that suggestion and I reject it.
108. The difficulty here is that it is plainly not going to be possible for the jury to hear any better evidence regarding Mr Dorris’ driving on the day of the accident than has already been heard from the RAIB and by the reading into evidence of his second interview under caution.
109. I accept the submissions CTI that Mr Dorris did not say, either in the immediate aftermath or in his police interview, that he had fallen asleep. He may have said that he “blacked out”, although he may have talking about the immediate moments after the accident. RAIB has determined that, on the balance of probabilities, he did experience

a “microsleep”; we do not, of course, know what (if anything) Mr Dorris himself told RAIB directly. However, if Mr Dorris did indeed have a microsleep, we do not know when the microsleep started, how long it lasted, or the precise and specific effect waking had on him and his actions. We will obviously never know, not least because he is not giving evidence. It is unrealistic to think that the evidence of other drivers can assist with this.

110. For completeness, RAIB’s Report did not exclude the possibility that the Mr Dorris was fatigued. Paragraph 136 (ii) of the Report states “...although there is no evidence that the driver’s shift pattern carried an exceptional risk of causing fatigue, it is possible that the driver had become fatigued due to insufficient sleep when working very early turns of duty”.
111. The RAIB witnesses explained that they found insufficient evidence to link the driver’s possible fatigue with TOL’s management of fatigue risk. There is no evidence to suggest that the driver felt too fatigued to drive the tram at the start of his duty or that he felt unable to report this to his employer for fear of the repercussions. Dr Young explained in his evidence that human beings find it difficult to judge their own tiredness. Neither could the RAIB find any evidence to suggest that the driver was unaware of the need for sufficient sleep.
112. RAIB’s analysis of TOL’s fatigue risk management arrangements is in paragraphs 362 to 382 of the RAIB Report. As Dr Young explained in his evidence, RAIB concluded that TOL’s fatigue risk management arrangements did not always reflect good practice and there was considerable scope for improvement: hence RAIB’s recommendation 11.
113. Expert evidence on fatigue was provided to the BTP investigation by Dr Stone and Dr Dickinson. The differences between their reports on the one hand, and the RAIB Report on the other, are limited. Dr Stone and Dr Dickinson note the elevated risk of working on permanent early shifts and the possibility that the driver was fatigued on the morning of the accident due to partial sleep deprivation. Dr Stone’s conclusion that “...the monotony of driving through a tunnel, the low alertness at this time and the partial sleep deprivation may have led to a microsleep” is in truth, hardly distinguishable from the views expressed in the RAIB Report.
114. The families submit that RAIB “*accepted too many of Mr Dorris’s explanations*”. Mr Ritchie QC’s and Mr Byrne’s analysis of what they say is the “logical and probable sequence of events” is, frankly, a submission. I agree with CTI that it is merely one opinion, and it is easy to speculate about many more explanations. But the real point is that the opinion proposed by the five families is unlikely to be bolstered or refuted by calling further live evidence.
115. The driving of the tram on the approach to the tunnel was covered by RAIB at paragraphs 139 to 142 of its report. At paragraph 141 it says: “Controlling the tram’s speed during the 49 seconds between accelerating the tram after the right-hand curve leaving Lloyd Park, and reaching his normal braking point at the second tunnel gap, did not require a large amount of concentration or actions from the tram driver, particularly as the tram’s cruise control system was probably managing its speed from a point near the entrance to the first tunnel.”

116. As to the issues raised about the “*normal braking point*” RAIB carried out detailed analysis of the available evidence, and concluded that the driver lost awareness of the driving task by the time he reached the normal braking point. RAIB acknowledge the possibility (in their definition) or probability (more likely than not) that the driver had a microsleep at some point before his normal braking point and during a time of low workload. However, if he did indeed have a microsleep, there is limited evidence to show when this occurred and for how long it lasted. Again, further evidence on this from other witnesses is not going to assist the jury.
117. As to the momentary braking in the third tunnel, RAIB does not consider that an involuntary movement of the TBC from a drive position into service braking and back into drive is likely. It acknowledged, however, that significant uncertainty remains as to the exact sequence of events on the approach to the end of Sandilands tunnel. In paragraph 156 of RAIB’s report it says:
- It is uncertain when the driver began to regain awareness of the driving task, although it is possible that he did so about eight seconds (155 metres) after the second tunnel gap when he made a brief brake application (paragraph 129). It is therefore uncertain when he started to become aware of the external cues, uncertain which (if any) external cues influenced his initial reconstruction of his mental picture and uncertain which (if any) cues were seen subsequently.*
118. This uncertainty will not, realistically, be resolved by calling further witnesses to give evidence at the inquests.
119. In respect of the VE-COM, I understood the evidence to be clear: a driver would not expect to look at the VE-COM while driving. A driver would know on which line and in which direction he has set off; what the end destination is; and which stations he will pass through, since he is familiar with the route. In the context of Mr Dorris’s loss of awareness and his statement that he thought he was travelling in the other direction, towards Lloyd Park, it is suggested that (a) there was a culpable failure to examine the VE-COM scheme and ascertain he was travelling towards Wimbledon (or possibly Sandilands) and (b) the fact that he did not do so means he cannot genuinely have thought he was travelling towards Lloyd Park, and therefore undermines his credibility.
120. As CTI submit, there is of course a much simpler potential explanation. If Mr Dorris had just awoken and was in a state of confusion, he might well have assumed he was travelling towards Lloyd Park, or he might have been sufficiently confused that he did not form a thought-through conscious judgment.
121. I also accept the submission that this is a red herring. The jury will not be hearing from Mr Dorris. They will not be hearing about his use of the VE-COM. Further evidence from other drivers will not help the jury. What another driver made of the VE-COM while alert on a normal shift is neither here nor there. Nor will any further, fuller technical description of the VE-COM and its function assist.

122. In respect of the lighting on the approach to the exit of the tunnel, the visibility of the lights in the cutting on the final approach to the curve is covered in detail by the RAIB Report at paragraphs 165 to 168.
123. In the premises, I do not accept that the RAIB Report was incomplete, flawed or deficient in respect of these issues.

Issue 4: Speed sign placement / Overspeed alarms and automatic braking

124. Mr Ritchie QC and Mr Byrne submit that RAIB wrote its report "in ignorance" of the law [written submission I, page 9, para f] and that Mr French "admitted in evidence that he did not really consider" The Railway Safety Regulations 1997 Regs "...at all in the investigation" [page 9, para g].
125. That is not an accurate representation of the evidence – see the Transcript, Day 12, page 80. In fact, Mr French said that whilst the Regulations were not referenced in his report, he was aware of them. He said that RAIB come across the Regulations in the course of their investigations and, although he had not read them cover to cover, he read them as and when necessary as part of his investigations. More importantly, Mr French went on to explain why they are not particularly relevant to the RAIB investigation: (a) they are very general (I note they state simply: "*where appropriate, equipment which is suitable and sufficient is provided and maintained*" [Regulation 5(1)(b)]) and the more specific and relevant guidelines were referred to in detail, and (b) it is not for RAIB to assess the extent to which TOL/TfL complied with legislation.
126. RAIB concluded that these Regulations were not intended to require line of sight systems to install technology to control the risk of overspeeding. However, the Regulations could reasonably be interpreted to mean that appropriate signage should be installed. The evidence presented to the inquests indicated that the tramway sector and safety regulator considered that the signage described in RSPG was 'appropriate'. As Mr French explained (on a number of occasions), RAIB showed that the signage required by RSPG was not suitable and sufficient, and needed to be improved.
127. Mr French also explained, more than once, how the RSPG guidance on the placement of signs was interpreted by the entire tramway and the safety regulator, and that this was consistent with mainline practice. He explained that sole reliance on a single sign at a location such as Sandilands curve was inappropriate and that additional visual cues, such as advanced warning signs were needed to manage the risk. Consequently, this was the subject of an urgent safety advice and the subsequent recommendation 5 in the RAIB's Report.
128. In my view this provides no support for the argument that the RAIB investigation was incomplete, flawed or deficient.

Issue 5: Sleep and sleeping control measures

129. At Issue 5(a) it is suggested that the RAIB "*completely overlooked*" the issue of upgrading the OTDR. The complaint is that the black boxes were not replaced between 2000 and 2016 (NB, the evidence was that the memory could not have been upgraded in isolation; the whole device would have had to be replaced). The result was that the

black boxes recorded a maximum of about half a shift's worth of data. Had they been upgraded by 2016, no doubt weeks' worth of data might have been stored instead of half a shift's worth. The suggestion is that this needed to be done so that the data could be used "for safety" –i.e. to analyse speed.

130. TOL used radars guns and covert in-tram surveillance to monitor overspeeding. As CTI submit, if I accept the families' argument, the consequence would be that TOL would have had to believe that this was inadequate monitoring; to determine that the necessary way of monitoring was to use the OTDR and the loops; to upgrade the OTDR in every tram; to embark on a regular programme of analysis; to determine that there was overspeeding at the Sandilands curve; and then to take further steps in terms of training/signage etc. After all that, in order for this to be a causative factor, the jury would have to find that Mr Dorris would not, as a result, have approached the curve too fast, despite his microsleap/low workload/loss of awareness of surroundings or whatever. As a causative factor this is far too remote. It is not the purpose either of RAIB's investigation or these inquests to conduct a full safety audit of TOL/TfL.
131. In any event, it is clear that RAIB did not overlook these issues; and they asked other tramway systems whether they used OTDR data to monitor the performance of drivers (RAIB Report paragraph 398). Mr French explained in his evidence that spotting occasional late braking on the approach to tight curves such as at Sandilands would have been problematic using existing 'black-box' technology and would have required special software designed for that purpose. RAIB witnesses also explained that TOL had not recognised that drivers were sometimes braking late on the approach to Sandilands curve and therefore saw no need to adopt additional measures to monitor speed on the approaches to tight curves.
132. In their evidence, Mr Harrington and Mr French explained that some mainline railway companies are making more use of OTDR as part of their systems for managing the competence of train drivers, but this is surely a matter for me alone in considering my Regulation 28 duties.

Issue 6: Culture and safety learning

133. The families raise issues concerning the relationship between TOL and TfL, the evidence provided by Mr Snowden, the effect of TOL's "*punishment culture*" and TOL's lack of appreciation of 'red flags'.
134. The circumstances in which Jim Snowden, TCL's former Chief Engineer, produced his proposals for advance warning signage and their reception by TOL and the wider industry, including the regulator, has been explored in detail in the inquests, including by hearing evidence from Mr Snowden himself. Although that material was not available to the RAIB at the time it completed its original investigation, RAIB has now considered it carefully and determined that it does not affect the conclusions given in its report.
135. The RAIB Report covers the issue of 'just culture' in some detail at paragraphs 222 to 247. This identified the findings of two ORR audits that identified concerns about reporting to the line controllers, and the actual and perceived link between making

errors and initiation of the disciplinary process. These findings were informed by numerous witness interviews, a review of TOL's procedures and an anonymous survey.

136. RAIB agrees that a 'just culture' had not been established by the time of the accident. Consequently, it recommended that this should be addressed (part of recommendation 12).
137. Accordingly, I do not accept that the RIAB investigation is incomplete, flawed or deficient in this regard. In any event, no further evidence is required on these issues. Nor is any further evidence on the relationship between TOL and TCL more generally (given that TfL took over TCL's role in 2008, more than 8 years before the accident) realistically going to assist the jury.

Issue 7: Risk Assessment defects

138. I agree with CTI that RAIB has clearly explained the inadequacy of the risk assessments. In particular, a lack of "requisite imagination" meant that the catastrophic consequences of derailment on the Sandilands curve were underestimated. The level of risk of overspeeding and of the consequences of speeding around a curve were not recognised by the industry in general (including the regulator, the ORR). There have been hours of evidence on this.
139. It is inaccurate to suggest that the RAIB Report "provides little more than a chronology" of the risk assessments undertaken by TOL; paragraphs 196-214 in particular deal with this matter in some detail. In addition, these topics were covered in the further witness statement of Mr French, and in oral evidence.
140. None of the points raised in respect of Issue 7 add anything of substance to the matters raised in respect of Issue 1. They are all matters that were addressed in the RAIB's investigation and about which the RAIB inspectors have given evidence.
141. None of them demonstrate that the RAIB's investigation was incomplete, flawed or deficient.

Issue 8: The ORR failures

142. The families submit that the RAIB failed to consider the fact that none of the risk assessments had any mitigation, and that ORR had failed to spot this. They also raise the issue of why ORR did not "audit" TOL and TfL's risk assessments, and why signage was considered by ORR to be appropriate and in accordance with the 1997 Regulations as well as the Guidance.
143. During the evidence it was suggested on numerous occasions that those who constructed the tramway, and those who were subsequently responsible for the infrastructure, placed speed signs in a manner which was contrary to the ORR Guidance (RSPG-2). It was suggested that the requirement for the sign to be placed where the maximum permissible speed changed should be read as meaning that the sign must mean a "safe" maximum speed. As Mr Manknell points out, that view is not reflected in the evidence, and as was explained by RAIB witnesses, does not reflect practice across the rail or tramway sector, and would be impractical.

144. More to the point, whilst the signage was consistent with the guidance, the RAIB nevertheless agrees that the signage was not adequate. The need for better visual cues was the subject of both the Urgent Safety Advice issued shortly after the accident, and analysis and recommendations in the final Report.
145. It cannot therefore properly be said that there is credible evidence that the RAIB investigation is incomplete, flawed or deficient.

Unlawful killing

146. As Mr Bennett correctly states, it is not appropriate to consider potential conclusions at this stage of the inquests, and I do not do so.

Confusing terminology

147. Whilst it might be more convenient for coroners and jurors if the RAIB adopted orthodox legal definitions for the terminology used in their reports (in particular, the words “probable” and “possible”), I do not agree that the terminology (once explained to the jury in evidence) was especially confusing. I certainly do not accept that any party used language deliberately to confuse (if that is alleged). This issue has no bearing on the *Norfolk* threshold in any event.

Expediency

148. Finally, Mr Thomas submits that: “It is important that neither the families of those who died, nor the general public, are left with the belief that there was relevant and admissible evidence, available to the Coroner, the admission of which would not have unduly delayed or prolonged the inquest, but which was not adduced for reasons of expediency.”
149. I can deal with that submission briefly. There is no question of my decision on further witness evidence being based on expediency. My decision is based on my interpretation of the law.

Conclusion

150. The RAIB evidence, together with the additional evidence (which supplemented the RAIB evidence) heard by the jury to date, has covered all of the matters within the scope of these inquests and all matters that must be ascertained by the jury pursuant to section 5 of the 2009 Act, namely who the deceased were and how, when, where and in what circumstances they came by their deaths.
151. After careful consideration of the law and the submissions of all parties, I have concluded that there is no credible evidence that the investigation the RAIB is “incomplete, flawed or deficient”.
152. On a proper analysis of the *Norfolk* case, I have further concluded that not only am I not required to call further evidence, but that I am not *permitted* to call further evidence as a matter of law.

153. Even if I am wrong about that, I have concluded further, for the reasons set out above, that it is unnecessary to call further evidence in order to assist the jury in coming to their conclusions on those limited matters upon which they are entitled to express a view. As Mr Ashley-Norman QC elegantly puts it: "...if it is unnecessary to call a particular piece of further evidence, then it is necessary for that evidence not to be called."

SARAH ORMOND-WALSHE
HM SENIOR CORONER FOR SOUTH LONDON
28 June 2021