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5 April 2019



Mr Andrew Hall  
Deputy Chief Inspector of Rail Accidents  
Cullen House  
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Aldershot  
Hampshire GU11 2HP

Dear Andrew,

**RAIB Report: Overturning of a tram at Sandilands junction, Croydon, 9 November 2016**

I write to provide an update<sup>1</sup> on the action taken in respect of recommendation 1 addressed to ORR in the above report, published on 7 December 2017.

The annex to this letter provides details of the action taken regarding the recommendations. The status of recommendation 1 is '**implemented**'.

We will publish this response on the ORR website on 5 April 2019.

Yours sincerely,

Oliver Stewart

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<sup>1</sup> In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

## Update to RAIB

### Recommendation 1

*The intent of this recommendation is to improve the management of safety risk in the UK tram industry by enabling more effective UK-wide cooperation.*

ORR should work with the UK tram industry to develop a body to enable more effective UK-wide cooperation on matters related to safety, and the development of common standards and good practice guidance. As a minimum, the purpose and aims of this body should be to:

- i. provide a forum for the discussion of common safety issues and the exchange of experience;
- ii. the provision of authoritative and impartial advice and guidance on matters related to safety;
- iii. managing the development of safety related design and operational standards, and their subsequent maintenance;
- iv. participation in the development of industry standards and guidance by international bodies;
- v. sponsoring and project management of the research and development needed to inform the above;
- vi. gathering data, monitoring and reporting on the industry's safety performance (including comparisons of safety performance on different tramways);
- vii. providing suitable guidance on effective safety management, including guidance applicable to public highways; viii. working with tramways to help plan industry safety improvement; and
- ix. disseminating good practice from both the UK and overseas industries.

The body should be suitably constituted and funded to enable the effective delivery of the above functions. It should be structured so that ORR promotes, encourages and supports its operation.

### ORR decision

1. The tramway sector has established a safety and standards body known as the "Light Rail Safety and Standards Board" (LRSSB). The LRSSB is a subsidiary company of UKTram, with a separate governing body from the main UKTram Board, an independent chair and a board comprising of industry representatives. Funding is ring fenced from the UK Tram budget.
2. The LRSSB has appointed a Chief Executive Officer and four non - executive board members representing the owning authorities and operators. An interim Chair has also been appointed pending the identification and appointment of a suitable independent chair.
3. We consider that the role and remit of the LRSSB is capable of enabling more effective UK-wide cooperation on safety matters, and achieving effective implementation of the matters raised in Recommendation 1.

4. The LRSSB developed a funding model in conjunction with DfT that recognised that the costs of establishing and operating the LRSSB in the early years be shared between the DfT and sector. LRSSB developed a number of workstreams that would form the core of its business plan, supported by an initial budget.

5. In February 2019 the DfT announced it was allocating £1.5 million for the continued work of UKTram and the Light Rail Safety and Standards Board, in addition to the £0.25m they allocated during 2018/19. Although welcome, the DfT's current allocation of funding is less than the sector had requested.

6. We held discussions with UKTram's Managing Director and LRSSB's CEO on 1 March 2019. They confirmed that the sector has sufficient funding to finalise development activity and operate the LRSSB for the next three years, albeit with some of the planned activities potentially re-prioritised. The LRSSB's shorter term focus remains on developing and integrating the incident reporting arrangements and safety risk model; building a standards library; and sharing best practice. In response to the DfT announcement the LRSSB is reviewing how it can adjust its medium and longer term business plan and proposed workstreams, and will consult with the sector on future options that it will present to the Minister.

7. Separately, in response to ORR request for update on progress in implementing the RAIB Sandilands recommendations, during March 2019 all tramway owners and operators confirmed their continued commitment to LRSSB and support to the previously agreed funding arrangements.

8. ORR has in place formal arrangements to monitor the work of LRSSB. ORR will attend LRSSB board meetings as an observer and LRSSB asked that ORR conduct a review of progress and output of the LRSSB, initially after two years of operation. The purpose of the review is to establish whether the LRSSB is successfully carrying out those functions and meeting the requirements of the recommendation. This will be similar to the review ORR conducts of RSSB every five years. This review is currently scheduled to commence in the summer of 2021.

9. Developing specific funding proposals for specific prioritised workstreams is not unique to the tramway sector, and is part of the normal business planning cycle. ORR expects that the priority placed upon such workstreams will be informed by the emerging analysis from the safety risk model and incident database.

10. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, ORR in cooperation with UK tram owners, operators and infrastructure managers; DfT and UKTram has:

- taken the recommendation into consideration; and
- has taken action to implement it.

***Status: Implemented.***

## Previously reported to RAIB

1. In January 2018 ORR brought the tramway sector and DfT together at an industry conference to agree a way forwards to deliver recommendation 1. At the conference, the industry representatives agreed to establish the safety and standards body to take forward the key cross industry requirements of recommendation 1. A steering group comprising of representatives from owners, operators, and infrastructure managers, along with ORR and DfT, was established to consider how the LRSSB would be constituted, funded and the work it would undertake.
2. During the first half of 2018 the steering group investigated options, developed a scope for the new organisation and its function, structure, and budget. The steering group's conclusions were accepted by the tramway sector.
3. The steering group recommended that the Light Rail Safety and Standards Board be created, as a subsidiary to UKTram with a separate governing body from the main UKTram Board, an independent chair and a board comprising of Industry representatives.

The primary functions of the LRSSB are:

- Industry risk model informing industry decisions and sharing best practice.
- Development of standards and guidance:
- Interface with International bodies:
- Light Rail innovation and research:
- Interface with Government bodies:
- Safety accident and near miss reporting, collation and analysis:
- Reviewing dissemination of industry information and lessons learned:
- Training and competence assessment.

4. LRSSB will also oversee the development of a suite of competency frameworks for all grades of operational staff, with emphasis on drivers, control staff and maintenance staff as a minimum but with potential for development for other grades.

5. We considered the plan for the LRSSB, set out by UKTram in the list of primary functions, capable of achieving effective implementation of Recommendation

## Update

6. On 8 March 2019 UKTram provided the following update:

*Despite £1.5m of funding confirmed from the DfT by the Minister this does not match the industry proposed amount required over the next year years. Whilst not the full amount of funding that we (industry) asked for, it is enough for us to continue the formation of the LRSSB albeit slightly amended. This has of course changed our position and planned work areas.*

*The current amount of funding, will mean there is an impact on the amount of work the LRSSB can undertake in the future and the planned hand-over of work from UKTram to the LRSSB. We can however confirm that the running of the LRSSB for the next three years (will go ahead as anticipated) and the implementation of the industry Risk Model, TAIR and creation of a standards library will be undertaken as previously planned.*

*We will be meeting with the Minister to discuss future funding for work streams going forward following a formal written response we have sent.*

7. On 6 March 2019 Blackpool Council provided the following update:

*Work in the industry is ongoing. Blackpool Council are full members of UK Tram and are contributing to the funding of LRSSB (Light Rail Safety Standards Board) through the agreed funding arrangement. Any new guidance or standards introduced by the appropriate bodies will be reviewed and where appropriate incorporated into our Safety Management System along with the operation of the Trams undertaken by Blackpool Transport. The above also applied to any future extensions of our system/fleet/new trams.*

*The Council is committed to TAIR (tram accident Incident Reporting System) and will be incorporated into our Track Management System following the conclusion of the trials at Manchester.*

8. On 8 March 2019 Blackpool Transport provided the following update:

*UKTram have formed a steering group "Light Rail Safety and Standards Board" (LRSSB) Funding for which has now been announced. Although the funding is short, it is enough for us to continue the formation of the LRSSB as planned. The shortfall in the funding has changed UKTrams position and plans to a degree, and the shortfall will have an impact on the amount of work the LRSSB can undertake in the future. However, we can confirm the running of the LRSSB for the next three years. This will ensure the implementation of the industry Risk Model, TAIR and creation of a standards library.*

9. On 8 March 2019 Keolis Amey Metrolink and Transport for Greater Manchester provided the following joint update:

*KAM and TfGM welcome the launch of the Light Rail Safety and Standards Board (LRSSB) and are committed to working with LRSSB to provide the step change in the governance within the light rail sector. KAM and TfGM look forward to seeing the output from the sub-committees originally established by UKTram, and in particular Sub-Committee one, which will support existing action plans for recommendations 3 to 8.*

10. On 14 March 2019 Nottingham City Council provided the following update:

*In relation to the recommendations made by the RAIB in their report, I would like to reassure you that the City Council is fully supportive of, and engaged with, the*

*current activities of UK Tram and the establishment of the shadow Light Rail Transit Safety and Standards Board (LRTSSB), in accordance with Recommendation 1. We also recognise the importance of the shadow LRTSSB in undertaking activities across the industry to determine appropriate actions in response to the other recommendations that have been identified as being applicable to tram owners. Notwithstanding this, we are fully engaged with NTL in the activities that it has already undertaken in Nottingham since the publication of the report.*

*A shadow LRSSB has been in operation for some months, working on the Sandilands recommendations. Light Rail Operator's Heads of Safety have continued to meet to develop the Safety Risk Model and Tram Accident & Incident Reporting tool. Having received DfT funding, the LRSSB is now mobilising and NTL, together with Nottingham City Council, have agreed their respective funding contributions.*

11. On 5 March 2019 Nottingham Trams Limited provided the following update:

*An industry working group is currently reviewing the vehicle which can deliver the Light Rapid Transit Safety Body (LRTSB). This group will lead in agreeing and setting the standards for the implementation of measures required to satisfy recommendations from the Sandilands RAIB report. Key to success will be the regulatory framework around the LRTSB and standards compliance.*

*NTL are actively involved in UK Tram led working groups to implement the aims i - ix detailed in this recommendation.*

*Having appropriate standards and regulation in place applying to duty holders and system owners will be a critical factor for successful and consistent implementation of the recommendations in this report.*

*Update 5 March 2019*

*A shadow LRSSB has been in operation for some months working on the Sandilands recommendations. Light Rail Operator's Heads of Safety have continued to meet to develop the Safety Risk Model and Tram Accident & Incident Reporting tool. Having received DfT funding the LRSSB is now mobilising and NTL together with Nottingham City Council have agreed their respective funding contributions.*

12. On 8 March 2019 Tramlink Nottingham Ltd provided the following update:

*In relation to the recommendations made by the RAIB in their report, I would like to reassure you that TNL is fully supportive of, and appropriately engaged with, the current activities of UK Tram and the establishment of the shadow Light Rail Safety and Standards Board (LRSSB), in accordance with Recommendation 1. We also recognise the importance of the shadow LRSSB in undertaking activities across the industry to determine appropriate actions in response to the other recommendations that have been identified as being applicable to tram owners. Notwithstanding this, we are fully engaged with NTL in the activities that it has already undertaken in Nottingham since the publication of the report.*

*Update: A shadow LRSSB has been in operation for some months working on the Sandilands recommendations. Light Rail Operators' Heads of Safety have continued to meet to develop the Safety Risk Model and Tram Accident & Incident Reporting tool. Having received DfT funding the LRSSB is now mobilising and NTL together with Nottingham City Council have agreed their respective funding contributions which cover the total funding contributions required from Nottingham.*

13. On 8 March 2019 South Yorkshire Passenger Transport Executive provided the following update:

*As detailed in our September response SYPTE has approved our funding contribution. The recent announcement from the Department for Transport (DfT) on their agreement to contribute towards the running of the Light Rail Safety and Standards Board (LRSSB) is welcome. SYPTE look forward to working with the LRSSB going forward and are happy to provide support as required.*

14. On 7 March 2019 Stagecoach Supertram provided the following update:

*We welcome the 7<sup>th</sup> February announcement from the Department for Transport confirming funding towards the establishment of the Light Rail Safety Standards Board. Supertram will continue to be supportive of this approach towards collaborative working within in the tram industry and would welcome further commitment to the longer term support of the LRSSB.*

15. On 8 March 2019 Tram Operations Ltd provided the following update:

*UK Tram have now confirmed that funding from the Department for Transport for the Light Rail Safety and Standards Board (LRSSB) is in place and the Board is now established. As such TOL's direct involvement in LRSSB Steering Committee matters ended at the last meeting of that group.*

*To date the impact of the delay in funding has not directly impacted TOL's plans.*

16. On 7 March 2019 Transport for London provided the following update:

*We were a key part of the steering group (and its working groups) set up to establish an industry body responsible for ensuring better cooperation on safety and standards. This steering group fulfilled its remit with the establishment of the Light Rail Safety Standards Board (LRSSB) at the beginning of February 2019.*

*We have formally agreed to the setting up of the LRSSB and to our allocation of the funding needed for the first three years of operation. We have agreed to its governance arrangements and potential future work plan and have responded to UKTram to confirm this.*

*Our Director of Rail and Sponsored Services is also one of the four Non Executive Directors on the LRSSB. The first meeting of the LRSSB took place on 12 February 2019.*

*We continue to see the collaborative approach fostered through this group as the best means to deliver the improvements required across the industry.*

17. On 8 March 2019 Transport for West Midlands & West Midlands Metro provided the following joint update:

*West Midlands Metro ("WMM") welcomes the decision by Government, announced at our Centenary Square construction site to fund the Light Rail Safety and Standards Board although we are concerned that Government has only committed to partially meeting the funding that was initially indicated would be provided. WMM is fully committed to supporting LRSSB meet its objectives and the network is represented on the LRSSB Board by the Director, West Midlands Metro who has been asked to stand in as acting Chair and by the Operations Director, Midland Metro Limited who has been appointed as anon-executive director by the industry.*

*We will work with LRSSB to ensure that as much of the planned activity can be delivered within the overall funding envelope agreed with industry and government.*

18. On 6 March 2019 Edinburgh Council provided the following update:

*We also fully support UKTram and as an owner/authority are committed to the provision of the industry element of the funding for LRSSB. We share the concern of Edinburgh Trams regarding the Government's funding element but look forward to monitoring progress of the items listed in Recommendation 1 now that the LRSSB is formed. Long term funding of the LRSSB is also a concern and will assist where we can with ideas and discussions regarding the longevity of the Board.*

19. On 6 March 2019 Edinburgh Trams provided the following joint update:

*Edinburgh Trams continues to fully support UKTram and the now constituted Light Rail Safety & Standards Board (LRSSB). We are committed to the provision of the industry element of the funding for LRSSB but are concerned that as a result of the delay in provision of the full UK Government element of funding that this may lead to LRSSB not being able to fully deliver its services.*



## Previously reported to RAIB

### Recommendation 1

*The intent of this recommendation is to improve the management of safety risk in the UK tram industry by enabling more effective UK-wide cooperation.*

ORR should work with the UK tram industry to develop a body to enable more effective UK-wide cooperation on matters related to safety, and the development of common standards and good practice guidance. As a minimum, the purpose and aims of this body should be to:

- i. provide a forum for the discussion of common safety issues and the exchange of experience;
- ii. the provision of authoritative and impartial advice and guidance on matters related to safety;
- iii. managing the development of safety related design and operational standards, and their subsequent maintenance;
- iv. participation in the development of industry standards and guidance by international bodies;
- v. sponsoring and project management of the research and development needed to inform the above;
- vi. gathering data, monitoring and reporting on the industry's safety performance (including comparisons of safety performance on different tramways);
- vii. providing suitable guidance on effective safety management, including guidance applicable to public highways; viii. working with tramways to help plan industry safety improvement; and
- ix. disseminating good practice from both the UK and overseas industries.

The body should be suitably constituted and funded to enable the effective delivery of the above functions. It should be structured so that ORR promotes, encourages and supports its operation.

### ORR decision

1. At our suggestion, RAIB agreed that ORR should own and lead this recommendation in order to put us in a position to support and facilitate industry action.
2. At a meeting in November 2017, ORR and UKTram agreed to establish an independent review group to research options on how to satisfy the requirements of recommendation 1. It was decided that the most appropriate way to fulfil this function would be to develop a safety and standards board. The safety and standards board would have close links with UKTram, but not be functionally part of it.
3. Recommendation 1 requires the UK tram industry to establish a safety and standards body; this will potentially have far reaching consequences on the whole of the sector. Additionally, many of the other recommendations require cross industry co-ordination and as such we felt it was appropriate for ORR to facilitate the initial

cross-industry collaboration. To that end, ORR convened an industry conference in Manchester on 22 January 2018.

4. At the conference, the industry representatives agreed to establish a safety and standards body to take forward the key cross-industry requirements of recommendation 1. A steering group was established to consider how the standards body would be constituted, funded and the type of work it would undertake.

5. Significantly, at this conference the DfT representative stated that he was liaising with the Department's finance team regarding funding. A firmer commitment to provide financial support to the establishment and running of the standards body was made at the July LRSSB steering group meeting.

6. The first meeting of the steering group was held on 27 February 2018 and it has met on a monthly basis since then. The steering group is made up of representatives from tram owners, operators and infrastructure managers, along with ORR and DfT. The project to establish the standards body is being managed by UK Tram and they chair the steering group.

7. The steering group considered three options for an organisation that could deliver the requirements of the safety and standards board: an expanded role for UKTram; developing RSSB's remit to deliver the functions of a safety and standards board for the tramway sector, or creating a new body. Industry duty holders decided the most effective way of fulfilling those requirements would be to establish a new body – the Light Rail Safety and Standards Board (LRSSB). They also decided that LRSSB should investigate the advantages of expanding the role of the LRSSB to include all light railways, and not be restricted to tramways.

8. The LRSSB has been formally established, with a registered company name, a shadow board and an interim chief executive officer (CEO) appointed. It has developed a costed and prioritised work plan setting out key activities for years one and two. It has begun the recruitment exercise for a chair and non-executive directors. Once funding has been secured UKTram will elect a substantive Board and appoint a CEO.

9. The LRSSB is a subsidiary company of UKTram, with a separate governing body from the main UKTram Board, an independent chair and a board comprising of industry representatives. Funding would be ring fenced from the UK Tram budget.

10. LRSSB developed a funding model in conjunction with DfT that proposes how the costs should be shared between the sector and DfT and how the sector share should be split between individual operators. All tram owning authorities and operators have formally agreed to support the LRSSB in accordance with the funding model and have committed to provide one third of the funding for it for an initial three year period, on condition that DfT provide the other two thirds. ORR is in regular communication with DfT officials to gain greater clarity regarding their commitment to provide funding, and recently met with the Parliamentary Under Secretary of State for Transport.

11. Nottingham City Council's support of the proposed funding model is limited to the first years cost allocation only and that subsequent contribution requirement is subject to UKTram reporting on the previous 12 months and to a review of the Business Plan and future resource requirements of the LRSSB.

12. The DfT has not yet formally committed the required funding nor indicated timescales as to when this funding will be made available. We believe the formal DfT funding commitment will be confirmed imminently and at that stage the recommendation can be reported as implemented.

13. If the funding is not forthcoming, it is unlikely that the LRSSB could be established as envisaged.

14. The primary functions of the LRSSB:

- Industry risk model informing industry decisions and sharing best practice (see recommendation 2).

The LRSSB will develop and implement an industry-wide risk model for adoption by all relevant Light Rapid Transit systems in the British Isles

- Development of standards and guidance

The LRSSB will be the custodian for Light Rail standards and guidance for the UK. This will include standards for operations, engineering, highways interface, management, environment quality and health & safety

- Interface with International bodies

LRSSB will develop and oversee mutually beneficial relationships with relevant international bodies

- Light Rail innovation and research

LRSSB will initiate and commission research with potential commercial benefit in the wider industry field. LRSSB will also monitor relevant international research programmes to ensure the benefit of any lessons learned. Human factors research and spread of best practice will be a high priority.

- Interface with Government bodies

LRSSB will develop and oversee mutually beneficial relationships with relevant government departments and governmental bodies, to include as a minimum DfT, ORR, BEIR and the DWP

- Safety accident and near miss reporting, collation and analysis

LRSSB will develop a standardised safety reporting system, to be applicable to all tramways and light railways, to provide national oversight and understanding.

- Reviewing dissemination of industry information and lessons learned#

This will include encouraging and facilitating peer review between systems with shared and agreed outcomes to the benefit of all members.

- Training and competence assessment

15. LRSSB will oversee the development of training packages in relation to safety and standards with an initial emphasis on Independent Competent Person (ICP) accreditation and the spread of best practice in training methods.

16. LRSSB will formalise the certification of Independent Competent Persons within the Light Rail sector, with a training syllabus and accreditation/certification granted via competency-based assessment and monitoring.

17. LRSSB will also oversee the development of a suite of competency frameworks for all grades of operational staff, with emphasis on drivers, control staff and maintenance staff as a minimum, but with potential for development for other grades.

18. We consider the plan for the LRSSB, set out by UKTram in the list of primary functions, capable of achieving effective implementation of Recommendation 1. LRSSB asked that ORR conduct a review of progress and output of the LRSSB after it has been in operation for two years, and thereafter periodically at an interval to be determined. The purpose of the review is to establish whether the LRSSB is successfully carrying out those functions and meeting the requirements of the recommendation. This will be similar to the review ORR conducts of RSSB every five years.

19. We are encouraged by the progress made by the steering group, with the support of the tram industry, in establishing the LRSSB. We see the collaborative approach fostered through this group as the best means to deliver the improvements required across the industry. As mentioned above, we would expect that the status of the recommendation could be moved to 'implemented', as soon as DfT confirms funding.

20. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, ORR in cooperation with UK tram owners, operators and infrastructure managers; DfT and UKTram has:

- taken the recommendation into consideration; and
- is working on the establishment of the LRSSB, which will be complete once DfT have confirmed the necessary funding

***Status: Implementation on-going.*** ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.