	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS THIS REPORT IS BEING SENT TO: **UKTram,** to be disseminated to all tramway operators. [redacted] **– Managing Director** [redacted] **– Safety Assurance Manager** **The Department for Transport**
1	CORONER I am Miss Sarah Ormond-Walshe, HM Senior Coroner, South London jurisdiction
2	CORONER'S LEGAL POWERS I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	INVESTIGATIONS and INQUESTS touching the deaths of: Dane CHINNERY Donald COLLETT Robert HUXLEY Philip LOGAN Dorota RYNKIEWICZ Philip SEARY; and Mark SMITH An investigation was opened on 21st November 2016 and inquests completed on 22nd July 2021. Conclusion of Accident was made for all the deceased.
4	CIRCUMSTANCES OF THE DEATH A jury found:

	In the early morning of 9th November 2016 the deceased was a passenger on the Tram 2551 travelling between Lloyd Park Station and Sandilands station. The tram driver became disorientated, which caused loss of awareness in his surroundings, probably due to a micro-sleep. As a result of which the driver failed to brake in time and drove the tram towards a tight curve at excessive speed. The tram left the rails and overturned onto its right side, as a result of which the deceased was ejected from the tram and killed. The Conclusion the jury found was: Accident, adding a narrative. <u>TOL</u> 1. The risk assessment process failed to sufficiently identify the risk of the tram overturning and crashing at the tight Sandilands curve at high speed with the probability of fatalities. 2. TOL identified the importance of line of sight driving and route knowledge but failed to identify additional measures to mitigate risk. 3. The lack of a 'just culture' discouraged drivers from reporting health and safety concerns. <u>The driver</u> The driver lost awareness and became disorientated ahead of the Sandilands curve probably due to a micro-sleep. Following this the driver failed to hit the braking point by which time the tram was travelling too fast to negotiate the Sandilands curve. The result was a high speed derailment, the tram over-turning and 7 fatalities.
5	**CORONER'S CONCERNS** The **MATTER OF CONCERN** is as follows. - The risk of under-reporting of incidents
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths. All tramway operators should give consideration to subscribing to CIRAS or to another similar anonymous staff member reporting scheme, and further to look at whether such schemes are used, and if not, why not.
7	**YOUR RESPONSE**

	You are under a duty to respond to this report within 56 days of the date of this report, namely by 23rd November 2021. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed. If you require any further information or assistance about the case, please contact the Coroner's Officer, [redacted]
8	**COPIES and PUBLICATION** I have sent a copy of my report to the following Interested Persons: and copied to: Family of Dane CHINNERY Family of Donald COLLETT Family of Robert HUXLEY Family of Philip LOGAN Family of Dorota RYNKIEWICZ Family of Philip SEARY Family of Mark SMITH Tram Driver [redacted] Tram Operations Limited Transport for London Bombardier Transportation UK Limited Rail Accident Investigation Branch British Transport Police Office of Rail and Road London TravelWatch Baroness Vere of Norbiton I am also under a duty to send the Chief Coroner a copy of your response. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	**DATE: 28th September 2021** **SIGNED BY CORONER:**

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS THIS REPORT IS BEING SENT TO: **UKTram** [redacted] **– Managing Director** [redacted] **– Safety Assurance Manager** **Light Rail Safety and Standards Board** [redacted] **– Chief Executive Officer** **The Department for Transport**
1	CORONER I am Miss Sarah Ormond-Walshe, HM Senior Coroner, South London jurisdiction
2	CORONER'S LEGAL POWERS I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	INVESTIGATIONS and INQUESTS touching the deaths of: Dane CHINNERY Donald COLLETT Robert HUXLEY Philip LOGAN Dorota RYNKIEWICZ Philip SEARY; and Mark SMITH An investigation was opened on 21st November 2016 and inquests completed on 22nd July 2021. Conclusion of Accident was made for all the deceased.
4	CIRCUMSTANCES OF THE DEATH

	A jury found: In the early morning of 9th November 2016 the deceased was a passenger on the Tram 2551 travelling between Lloyd Park Station and Sandilands station. The tram driver became disorientated, which caused loss of awareness in his surroundings, probably due to a micro-sleep. As a result of which the driver failed to brake in time and drove the tram towards a tight curve at excessive speed. The tram left the rails and overturned onto its right side, as a result of which the deceased was ejected from the tram and killed. The Conclusion the jury found was: Accident, adding a narrative. Narrative of the jury to the contributing factors of the Sandilands tram crash TOL 1. The risk assessment process failed to sufficiently identify the risk of the tram overturning and crashing at the tight Sandilands curve at high speed with the probability of fatalities. 2. TOL identified the importance of line of sight driving and route knowledge but failed to identify additional measures to mitigate risk. 3. The lack of a 'just culture' discouraged drivers from reporting health and safety concerns. The driver The driver lost awareness and became disorientated ahead of the Sandilands curve probably due to a micro-sleep. Following this the driver failed to hit the braking point by which time the tram was travelling too fast to negotiate the Sandilands curve. The result was a high speed derailment, the tram over-turning and 7 fatalities.
5	**CORONER'S CONCERNS** The **MATTER OF CONCERN** is as follows. - Trams do not have automatic braking systems
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths. **Automatic braking systems to prevent over-speeding.** During the evidence, it became clear that trains have automatic braking systems. They are of course different from trams, which are driven by "line of sight". However, it seems to me that it would be appropriate for a fresh assessment to be made of whether automatic braking systems would be appropriate for trams.

7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 23rd November 2021. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed. If you require any further information or assistance about the case, please contact the Coroner's Officer, [redacted]
8	**COPIES and PUBLICATION** I have sent a copy of my report to the following Interested Persons: and copied to: Family of Dane CHINNERY Family of Donald COLLETT Family of Robert HUXLEY Family of Philip LOGAN Family of Dorota RYNKIEWICZ Family of Philip SEARY Family of Mark SMITH Tram Driver [redacted] Tram Operations Limited Transport for London Bombardier Transportation UK Limited Rail Accident Investigation Branch British Transport Police Office of Rail and Road London TravelWatch Baroness Vere of Norbiton I am also under a duty to send the Chief Coroner a copy of your response. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	**DATE: 28th September 2021** **SIGNED BY CORONER:** pp Mare

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS THIS REPORT IS BEING SENT TO: **Transport for London** [redacted] – General Manager, London Trams **Bombardier Transportation UK Ltd** [redacted] – Company Secretary **UKTram,** to be disseminated to all tramway operators. [redacted] – Managing Director [redacted] – Safety Assurance Manager **Light Rail Safety and Standards Board** [redacted] – Chief Executive Officer **The Department for Transport**
1	CORONER I am Miss Sarah Ormond-Walshe, HM Senior Coroner, South London jurisdiction
2	CORONER'S LEGAL POWERS I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	INVESTIGATIONS and INQUESTS touching the deaths of: Dane CHINNERY Donald COLLETT Robert HUXLEY Philip LOGAN Dorota RYNKIEWICZ Philip SEARY; and Mark SMITH

	An investigation was opened on 21st November 2016 and inquests completed on 22nd July 2021. Conclusions of Accident were made.
4	**CIRCUMSTANCES OF THE DEATH** A jury found: In the early morning of 9th November 2016 the deceased was a passenger on the Tram 2551 travelling between Lloyd Park Station and Sandilands station. The tram driver became disorientated, which caused loss of awareness in his surroundings, probably due to a micro-sleep. As a result of which the driver failed to brake in time and drove the tram towards a tight curve at excessive speed. The tram left the rails and overturned onto its right side, as a result of which the deceased was ejected from the tram and killed. The Conclusion the jury found was: Accident, adding a narrative. Narrative of the jury to the contributing factors of the Sandilands tram crash <u>TOL</u> 1. The risk assessment process failed to sufficiently identify the risk of the tram overturning and crashing at the tight Sandilands curve at high speed with the probability of fatalities. 2. TOL identified the importance of line of sight driving and route knowledge but failed to identify additional measures to mitigate risk. 3. The lack of a 'just culture' discouraged drivers from reporting health and safety concerns. <u>The driver</u> The driver lost awareness and became disorientated ahead of the Sandilands curve probably due to a micro-sleep. Following this the driver failed to hit the braking point by which time the tram was travelling too fast to negotiate the Sandilands curve. The result was a high speed derailment, the tram over-turning and 7 fatalities.
5	**CORONER'S CONCERNS** The **MATTER OF CONCERN** is as follows. - The risk of passenger ejection through tram doors
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths.

	At least one of the seven died as a result of being ejected through the bottom of the door leaf. A recommendation was made by the RAIB that consideration should be given to the feasibility of strengthening doors, whether in current tram stock or in future tram building. Little seems to have been done since. Consideration should be given to current and future trams as to whether tram doors can be adapted now or in the future.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by 23rd November 2021 I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed. If you require any further information or assistance about the case, please contact the Coroner's Officer, [redacted]
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	I am also under a duty to send the Chief Coroner a copy of your response. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response, about the release or the publication of your response by the Chief Coroner.
9	**DATE: 28th September 2021** SIGNED BY CORONER: pp Maine

	REGULATION 28 REPORT TO PREVENT FUTURE DEATHS **THIS REPORT IS BEING SENT TO:** **Transport Focus** [redacted] **– Chief Executive** **The Department for Transport**
1	**CORONER** I am Miss Sarah Ormond-Walshe, HM Senior Coroner, South London jurisdiction
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	INVESTIGATIONS and INQUESTS touching the deaths of: Dane CHINNERY Donald COLLETT Robert HUXLEY Philip LOGAN Dorota RYNKIEWICZ Philip SEARY; and Mark SMITH An investigation was opened on 21st November 2016 and inquests completed on 22nd July 2021. Conclusion of Accident was made for all the deceased.
4	**CIRCUMSTANCES OF THE DEATH** A jury found: In the early morning of 9th November 2016 the deceased was a passenger on the Tram 2551 travelling between Lloyd Park Station and Sandilands station. The

	tram driver became disorientated, which caused loss of awareness in his surroundings, probably due to a micro-sleep. As a result of which the driver failed to brake in time and drove the tram towards a tight curve at excessive speed. The tram left the rails and overturned onto its right side, as a result of which the deceased was ejected from the tram and killed. The Conclusion the jury found was: Accident, adding a narrative. Narrative of the jury to the contributing factors of the Sandilands tram crash TOL 1. The risk assessment process failed to sufficiently identify the risk of the tram overturning and crashing at the tight Sandilands curve at high speed with the probability of fatalities. 2. TOL identified the importance of line of sight driving and route knowledge but failed to identify additional measures to mitigate risk. 3. The lack of a 'just culture' discouraged drivers from reporting health and safety concerns. The driver The driver lost awareness and became disorientated ahead of the Sandilands curve probably due to a micro-sleep. Following this the driver failed to hit the braking point by which time the tram was travelling too fast to negotiate the Sandilands curve. The result was a high speed derailment, the tram over-turning and 7 fatalities.
5	**CORONER'S CONCERNS** The **MATTER OF CONCERN** is as follows. - The lack of a centrally funded national tram safety passenger group
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths. London TravelWatch is a passenger safety group which covers all public transport in Greater London. There is scope for a centrally funded national tram safety passenger group, covering all the different operators. I propose to recommend to the Department for Transport that consideration be given to setting up such a group.
7	**YOUR RESPONSE**

	You are under a duty to respond to this report within 56 days of the date of this report, namely by 23rd November 2021. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise you must explain why no action is proposed. If you require any further information or assistance about the case, please contact the Coroner's Officer, [redacted]
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9	**DATE: 28th September 2021** **SIGNED BY CORONER:** pp Mene