

## Recommendation Status Report: Pushchair trapped in tram doors and dragged, Nottingham

This report is based on information provided to the RAIB by the relevant safety authority or public body.

The status of the recommendation(s), as reported to us, are described by the following categories:

### Key to Recommendation Status

<b>Open</b> (replaces Progressing and Implementation On-going)	Actions to address the recommendation are ongoing.
<b>Closed</b> (replaces Implemented, Implemented by alternative means, and Non-implementation)	ORR consider the recommendation to have been taken into consideration by an end implementer and evidence provided to show action taken or justification for no action taken.
<b>Insufficient response:</b>	The end implementer has not provided sufficient evidence that the recommendation has been taken into consideration, or if it has, the action proposed does not address the recommendation, or there is insufficient evidence to support no action being taken.
<b>Superseded:</b>	The recommendation has been superseded either by a newer recommendation or actions have subsequently been taken by the end implementer that have superseded the recommendation.
<b>Awaiting response:</b>	Awaiting initial report from the relevant safety authority or public body on the status of the recommendation.

RAIB concern over the way that an organisation has responded to a recommendation are indicated by one of the following:

**Red** – RAIB has concerns that no actions have been taken in response to a recommendation.

**Blue** – RAIB has concerns that the actions taken, or proposed, are inappropriate or insufficient to address the risk identified during the investigation.

**White** – RAIB notes substantive actions have been reported, but the RAIB still has concerns.

# Recommendation Status Report



<b>Report Title</b>	Pushchair trapped in tram doors and dragged, Nottingham
<b>Report Number</b>	15/2018
<b>Date of Incident</b>	15/12/2017

Rec No.	Status	RAIB Concern	Recommendation	RAIB Summary of current status
15/2018/01	Closed - I	None	<p>This recommendation is intended to reduce trap and drag risk.</p> <p>Nottingham Trams Limited should review and improve arrangements intended to manage the risk of trap and drag during tram dispatch on its network. The review should consider equipment, operating practices and the interaction between these. Areas in which improvements should be considered include:</p> <ul style="list-style-type: none"> <li>I ensuring that tram drivers have the equipment needed for an effective final visual door check of all doors after interlock is achieved;</li> <li>I CCTV modifications to ensure a good view during the final visual door check of all areas where items could be trapped in closed and locked doors;</li> <li>I investigating possible door seal modifications to reduce the risk of trapping items and, if appropriate, developing a programme for installation of improved door seals (eg during planned major overhauls);</li> <li>I the initial training, refresher training and monitoring needed to ensure that drivers comply with tram stop procedures and understand the importance of undertaking an effective visual check of all doors after interlock is achieved; and</li> <li>I the initial training, refresher training and monitoring needed to ensure that travel officers: <ul style="list-style-type: none"> <li>o apply appropriate procedures when removing passengers from trams;</li> </ul> </li> </ul>	<p>ORR has reported that Nottingham Trams Limited has reported that it has completed actions taken in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>

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			<p>o understand trap and drag risk and how this affects their work; and</p> <p>o appreciate what should be considered as emergency situations and how they should respond to these.</p> <p>This recommendation may apply to other tramways (paragraphs 98, 99 and 101).</p>	
15/2018/02	Closed - I	None	<p>This recommendation is intended to increase Nottingham Trams' understanding of tram risk and the effectiveness of the mitigation measures on which it relies. It is possible that increased understanding of risk from low frequency, high consequence events could be assisted by Nottingham Trams working with the light rail industry body being set up in response to the RAIB's recommendation arising from the Sandilands accident (paragraph 107).</p> <p>Nottingham Trams Limited should review its risk assessment process with a view to:</p> <ul style="list-style-type: none"> <li>I improving the means by which it considers learning from other parts of the tramway and railway industries;</li> <li>I giving explicit and detailed consideration of the ways in which identified mitigation measures can fail, and the consequences when this happens; and</li> <li>I effectively evaluating the safety impact of changes to design and/or operational procedures.</li> </ul> <p>Nottingham Trams should then implement the identified changes and update its existing tram operation risk assessments in accordance with the enhanced procedures (paragraphs 98, 99 and 101).</p>	<p>ORR has reported that Nottingham Trams Ltd has reported that it has completed actions taken in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>