

# LRSSB Heads of Safety Meeting

Thursday 25<sup>th</sup> July 2019, 11:30-15:30, Manchester

Meeting No (6)

<b>Attendees:</b>			
Anthony Stanley <b>(AS)</b> Chair	Midland Metro Ltd	Stephanie Moffett <b>(SM)</b>	Transport for London
Mark Ashmore <b>(MA)</b>	UKTram/LRSSB	Chris Hopkinson <b>(CH)</b>	South Yorkshire Passenger Transport Executive
Louis Walmsley <b>(LW)</b>	Nottingham Express Transit	Neil Booth <b>(NB)</b>	Edinburgh Trams
Reddy Morley (RM)	Transport Infrastructure Ireland	Luke Albanises <b>(LA)</b>	Albanese Consulting
Chris Lewis <b>(CL)</b>	Sheffield Supertram	Beata Holol <b>(BH)</b>	Tram Operations Ltd
David Nichols <b>(DN)</b>	Manchester Metrolink	Chris Davis <b>(CD)</b>	Blackpool Transport
Resham Mal Rushforth <b>(RR)</b>	Midland Metro Ltd	Laura Reardon	Atkins
<b>Apologies:</b>			
Andy Wallace <b>(AW)</b>	First Group	Michael Powell <b>(MP)</b>	Edinburgh Trams
John Campbell <b>(JC)</b>	Strathclyde Partnership for Transport	Erica Pearson <b>(EP)</b>	LRSSB

## Agenda:

### 1. Welcome and Introductions

**(AS)** opened the meeting and confirmed he would be chairing the meeting in the absence of Andrew Wallace. **(AS)** gave safety instructions and 'housekeeping' rules.

All attendees introduced themselves around the table.

### 2. Minutes and Actions of Last Meeting

The notes from the previous meeting were accepted as an accurate reflection of the meeting.

### Action Summary – Ongoing / Outstanding Items

**Action: (AW)** to contact James Hammett to discuss when the Ian Rowe report will be ready to be circulated. **(Completed)** report issued.

**Action: (AW) & (AS)** to circulate medical guidance documents to **(DN)**. **(Completed)**.

**Action: (DN)** to share the Business Plan with **(DH)** to circulate to the group. **(Ongoing)**  
**(DN)** Stated that some revision work had taken place and he would issue document once in position to do so.

### 3. Atkins Risk Model Update

**(LR)& (LA)** provided an overview of the current status of Risk Model development work confirming the following:

- A draft report had been provided to Manchester;
- Four workshops had been undertaken with operators to date;
- HE's & PC's were being refined;
- The effect of low frequency high consequence events on risk profile (Terrorist Event) referenced;
- Response to low frequency high consequence events survey data:

**(LR)** stated that there had been little to no response from operators associated to the low frequency high consequence events survey sent out on 27<sup>th</sup> March 2019. In light of this the survey would be reissued.

**(DN)** suggested that HoS group need to be more proactive and committed to time scales. The group agreed that there should not be any foreseeable obstacles to the provision of LF/HC data once survey has been reissued.

**(LW)** suggested that it may be possible for further data to be obtained from Keolis associated to its European activities via the Global Head of Safety for Keolis.

**ACTION: (LW)** to contact Global Head of Safety for Keolis to determine if European event data can be obtained.

**(DN)** inquired if DLR and Tyne and Wyre would be included in current risk model works stream and if so would they have their risk model completed prior to other operators?

**(LA)** confirmed that it was anticipated to undertake risk model development for DLR and Tyne and Wyre, however this would be undertaken at a later date once the current agreed scope of works with operators has been completed.

**(BH)** inquired if Bowtie analysis was going to be integrated into operator risk models?

**(LR)** stated that this would be an additional piece of work that is possible, but outside of the original scope of works and that any revision or further development of the risk models would need to be agreed between operators and the LRSSB.

**(All)** raised the question of what is deemed as a suitable review period for individual risk models? **(LR)** suggested that an annual review of risk models would appear appropriate, however the duration of the review may be reduced / expanded relevant to each organisations level of risk or internal requirements.

## 4. UKTram Update

(MA) provided the group with an update associated to the following topics:

### 4.1 UKTram Chair Position

The new Chair of UKTram was announced at the 2019 Light Rail Conference on 25<sup>th</sup> July 2019 with confirmation of the appointment of Mr George Lowder to the position.

### 4.2 TAIR

Training has now been provided to all operators on the TAIR database, with substantial modifications to the system undertaken following feedback received during the training sessions.

The live introduction of TAIR was initiated on the 8<sup>th</sup> July 2019 to facilitate initial live use of the database by those operators that are already in a position to do so, and are not subject to additional database interface requirements or other internal restrictions. Subsequent to this a phased approach will be adopted by operators going live with TAIR as and when they become individually ready.

The live use of TAIR will provide the benefit to review and test the database in real time and undertake any minor modifications, alterations as well as identify any further development work moving forward.

### 4.3 UKTram Business Plan

The UKTram 2019 / 2020 business plan was published on 25<sup>th</sup> June 2019 setting out both the organisations strategic and key objectives. (MA) confirmed that the business plan can be referenced on the UKTram website.

(LW) inquired if UKTram / LRSSB had sufficient funding allocated at present to deliver and manage outputs. (MA) confirmed that objectives and deliverables would be prioritised and that both organisations had cut their cloth to fit. Additionally, if and when further funding is allocated, additional work streams would be initiated.

## 5. RAIB Update

(LW) drew the group's attention to RAIB report released this morning 25<sup>th</sup> July 2019, associated to a **(fatal collision between a tram and a pedestrian, near Saughton tram stop, Edinburgh, on 11<sup>th</sup> September 2018)**. Additionally (LW) stated that following review of the report he had made several observations:

- Wrong model of tram was referenced within the report (**Urbos 2**) as opposed to (**Urbos 3**);
- Report did not include any reference to current revision of crossing guidance documentation.

The group then proceeded to undertake a short discussion of general mitigation controls, in addition to current ORR topics of focus related to:

- Road Rail Vehicle Roll Away Incidents;
- Contractor Vehicles;
- System Visits.

On a final point **(LW)** asked the group to be aware of the court judgement related to injury claims submitted by cyclists, who incurred injuries, as a result of cycling over tram tracks in Edinburgh and that in turn has led to Edinburgh City Council being found liable.

**(LW)** stated that although the general may be that the cases were specific to Edinburgh under Scottish law, it may be prudent for the group to consider, whether the ruling sets any precedent within English law.

## **6. LRSSB Update**

**(MA)** Provided the group with an update associated to the following topics:

### **6.1 New LRSSB Website**

The new LRSSB website went live on 23<sup>rd</sup> July 2019 for the Light Rail Conference.  
*Note: subsequently the website is now due to go live w/c: 26/08/2019.*

### **6.2 RM3**

Following the RM3 launch event it was noted that discussions held with workshop groups on the day identified a want for more practitioner level training; some practical guidance on how to inspect against RM3, and templates on how to report and create output analytics.

At the RM3 board meeting held on 30<sup>th</sup> April 2019. These topics were discussed with ORR confirming that training would be arranged for the tram sector. Additionally in response to the standardisation of templates and analytics LRSSB have arranged for RM3 audit criteria to be transposed to an IT based platform (I Auditor). This is anticipated to provide a consistent and standardised audit structure and analytical platform that will aid training, analysis and introduction of RM3 within the industry. A proposal for options of the introduction of RM3 across the industry will be issued in due course.

### **6.3 Standards Process and Proposals**

A standardised process for the management of documents and proposals has been produced which light rail industry documents are developed, approved and issued - **(LRSSB GA 01 Light Rail Standards and Guidance Documentation Development and Approval Process)**.

The document provides a road map and formally defines the procedure by which LRSSB is able to create, revise or withdraw standards and guidance as well as manage deviations from them, in addition to the monitoring their the effectiveness.

In addition and in order to facilitate accurate management of proposal capture and document change and revision, a new dedicated module is currently being developed that will be accessible from the main TAIR IT platform. In turn members / interested parties will be able to raise proposals within TAIR from where they will be recorded and centrally administrated via LRSSB. This will provide full auditability, and overview of decision making process associated to proposals.

#### **6.4 New Guidance and Standards Database**

In order to host newly developed and revised guidance and standards documentation. A new documents database has been developed that is integrated in to the main TAIR IT platform. This will provide a full management framework for documents covering the following:

- ACOPS;
- Guidance;
- Standards;
- Policies;
- Procedures;
- General and rail specific H&S legislation.

The database will provide revision retention and change history tracking as well as secure ease of access to documents; with the advantage of business resilience due to being hosted on external servers.

#### **6.5 Guidance and Standards Documents**

##### **Standards Ready for Publication:**

- **LRG 1.0** Tramway Principles and Guidance;
- **LRG 2.0** Non-Motorised Crossings;
- **LRG 3.0** Management of Electro Magnetic Compatibility (EMC) Guidance.
- **LRG 5.0** Tramway Audible Warning Acoustic Test Guidance

##### **Standards Currently Under Review:**

- **LRG 4.0** Signing and Marking of Tramways and Highway Interface Guidance.

#### **6.6 Graduate Placements Update**

Discussions have taken place with Birmingham City University to advertise and appoint two graduate positions, within LRSSB. Currently the posts of Assistant Risk Manager and Assistant Standards Manager are being advertised on the Universities web based job notice board.

## 7. Fatigue

**(AS)** provided a short overview of the general and analytical functionality of Midland Metro's fatigue management system (FAID) that was adapted from the Australian aviation industry. Additionally **(AS)** also confirmed that ORR were looking at the industry to move away from twelve hour shift patterns to assist with the effective management of fatigue, further adding that he had already made alterations to shift patterns at Midland Metro to achieve this.

**(DN)** suggested that it would be beneficial for a presentation to be delivered on the FAID fatigue management system by consultants (Clockwork), which was concurred by the group.

**ACTION: (MA)** to arrange for fatigue consultants to deliver overview of FAID fatigue management systems to HoS.

## 8. AOB

### 8.1 ORR Visits to Operators and Duty Holders

**(AS),(LW)&(DN)** provided update associated to visits being undertaken by ORR to Operators and Duty Holders, conveying that ORR were seeking to observe evidence to reflect positive movement by the industry in respect of recommendations contained within Sandilands report.

**(AS)** informed the group of ORR's intention to visit each operator in respect of recommendation 3 of Sandilands report. **(DN)** stated that he was not sure that Duty Holders were aware of the status of activities following the Ian Rowe report.

**(MA)** referred to the update he had provided at April's HoS meeting, where an overview of the report confirmed that following the filtering of an initial 110 possible systems, a short list of 18 systems was highlighted for further investigation. For both AVSM and Driver Inattention. The overarching recommendation from this was that trials should now be undertaken for both AVSM and inattention systems to assist UKTram members to select systems suitable for their needs.

### 8.2 Review of vehicle maintenance systems against RM3

**(LW)** informed the group that they should note that ORR inspectors were now beginning to look at vehicle maintenance systems against RM3 audit framework criteria. This was also concurred by **(DN)**.

### 8.3 Review of TPG

**(RM)** inquired if issues and or observations could still be submitted in respect of the review of TPG. **(MA)** stated that the release of the updated version of TPG was imminent, however any observations could still be forwarded for review and requested that any observations should be sent on to himself.

**8.4 (RM)** and **(CH)** asked **(MA)** if an overview of TAIR could be provided in addition to access to the system.**(MA)** confirmed that this could be arranged, however separate organisational areas for each would have to be set up within the database first.

**ACTION: (MA) to provide (RM) and (CH) with access to TAIR.**

### **8.5 Urban Tram Forum Brussels**

**(RM)** informed the group that the Urban Tram Forum was being hosted in Brussels from the 10<sup>th</sup> - 12<sup>th</sup> September 2019. **(RM)** confirmed that he would send out details to group.

### **8.6 Drones**

**(LW)** inquired if any operators had experience problems with drones on the individual systems. The group confirmed that they had not experienced any issues related to drones, however, all agreed to keep a watching brief on the topic in line with emerging legislation.

### **8.7 Trial of Obstacle Detection Systems**

**(RM)** informed the group that he had been undertaking a review of advancements in obstacle detection systems for application on both grass and slab track. Two systems (Radio Detection and Ranging (**Radar**) and Light Detection and Ranging (**LIDAR**) were being trialled on vehicles in Frankfurt and Vienna.

### **8.8 Human Factors Study**

**(AS)** informed the group that Midland Metro had participated in a research study undertaken by Dr Callari of Coventry University related to human factors within the tram and light rail industry. The research topics covered driver behaviours, road end user behaviour in addition to the use of a haptic feedback (simulating the sense of touch) Traction Brake Controller (**TBC**). **(AS)** Stated that the findings of the study were extremely interesting and that he would share the results of study in due course.

Next meeting: Thursday 31<sup>st</sup> October 2019 between 10:30-15:30 – Birmingham

Action Summary

	Action	Date Raised	Owner	Status
1.	<b>(LW)</b> to contact Global Head of Safety for Keolis to determine if European event data can be obtained.	25/07/2019	<b>(LW)</b>	
2.	Low frequency high consequence event survey to be re sent to HoS group. <b>Note: Survey reissued on 30<sup>th</sup> July.</b>	25/07/2019	<b>(LR)</b>	Completed
3.	<b>(MA)</b> to provide access to TAIR for <b>(RM)&amp;(CH)</b>	25/07/2019	<b>(MA)</b>	
4.	<b>(MA)</b> to contact fatigue consultants (Clockwork) and arrange presentation to be delivered to HoS. <b>Note:(MA) has contacted Clockwork who have confirmed that they are able to deliver presentation on FAID fatigue management system on 9<sup>th</sup> January at HoS Meeting.</b>	25/07/2019	<b>(MA)</b>	Completed