[redacted]
HM Principal Inspector of Railways

Email: [redacted]@orr.gov.uk

23 July 2020

FAO: Assistant Coroner Mr Jonathan Stevens
St Pancras Coroners Court,
Camley Street,
London
N1C 4PP

By email only

Also by email to: [redacted]@camden.gov.uk

Regulation 28 Report to Prevent Future Deaths dated 29 May 2020
Arising out of the inquest touching the death of FLORA SHEN opened on 10 January 2020.

Dear Assistant Coroner Stevens

The ORR is grateful for your letter and accompanying Regulation 28 report to prevent future deaths dated 29 May 2020.

This letter is intended to be the ORR's formal response under Regulation 29 of the Coroners (Investigation) Regulations 2013 (the 'Regulations'), as set out in section 5 of the Regulation 28 report.

As you are aware from existing correspondence, ORR did not conduct a formal investigation into this fatality. This is in line with our policy on mandatory investigations[1] where the individual is an adult and the circumstances appear to indicate a deliberate act. In those situations ORR does not normally investigate.

Consequently the information in our response is based on our wider regulatory oversight monitoring of DLR and KAD rather than the outcome of a specific investigation of Ms Shen's death.

We have considered the circumstances of the incident and your concerns carefully and as we explain further below, we do not believe that we have the power to take the actions proposed in sections 5 and 6 of the report. With this in mind we recommend that the report should be directed towards Docklands Light Railway Limited (DLR) and Keolis Amey Docklands (KAD) and copied to TfL as the overarching body within which the DLR system resides.

[1] https://orr.gov.uk/__data/assets/pdf_file/0020/23717/rig-2014-02-investigation-of-deaths-including-suicides.pdf

ORR's understanding of the Coroner's concerns in section 5 of the report is that fundamentally the technical features of the DLR vehicles and the operational practices used on the system do not facilitate rapid response to circumstances where a person might fall onto the running lines.

It is a requirement of health and safety law that all businesses are obliged to undertake an assessment of the risks that their operations create, both to their own staff and to others not in their employment who may be affected (e.g. users of the transport system), and then put in place measures that control those risks so far as is reasonably practicable. As a health and safety regulatory body and enforcing authority ORR can only require that organisations fulfil this duty to deliver 'reasonably practicable' risk control measures.

ORR has confirmed that the risk assessments jointly undertaken by DLR and KAD include for the events of a person falling or jumping onto the track and the consequent potential events. This assessment identifies a range of control and mitigation measures for these events. These include, amongst other things, the alarm points on stations and random CCTV monitoring, and station signage, platform markings and surface finish. Measures also include wider initiatives such as proactive liaison with local police and mental health services.

ORR has confirmed that these control measures are in place and were in place at the time of the death of Ms Shen.

Given the existing technology of the railway ORR considers that these measures were appropriate and reasonably practicable. DLR and KAD have jointly revisited the existing assessment to consider the provision of platform screen doors at stations, similar to those used on the sub-surface platforms of the LUL Jubilee Line. It has determined that installation of these have such a high cost in relation to the frequency of RIDDOR reported incursions onto the track by members of the public that they cannot be considered as a reasonably practicable solution. The railway is nonetheless investigating the potential to improve the visibility of platform alarms for public use, and undertaking a programme of platform slip resistance improvement at targeted locations.

The view of ORR's inspector is that the risk assessments made by DLR and KAD are 'suitable and sufficient' as required by the Management of Health and Safety at Work Regulations 1999, and that the actions and controls & mitigations identified were in place at the time of the incident. As such DLR and KAD are fulfilling their legal duties.

ORR has challenged DLR on the reasonable practicability of providing emergency stop facilities within all the vehicles on the system. DLR have advised us that the vehicles already have 10 locations where a member of staff can activate an emergency brake application. Two of these are within the manual driving panels at each end of the vehicle and the other eight are located one at each doorway and activated by the member of staff inserting their key. This does appear to give a reasonable level of access to staff. Experience in mainline trains suggests that providing passengers with means to stop trains leads to misuse, which in turn can create different risks; including significant disruption to networks, overcrowding on trains, and ultimately passengers self-detraining from stalled trains with all the risk this brings. The unintended consequences of providing a passenger activated train stop is that they could easily cause more problems than they solve.

ORR has discussed with DLR the reasonable practicability of providing further technological solutions that could detect persons on the track and take action to stop approaching vehicles. DLR have advised us that they have investigated the availability of such technologies and are currently seeking a partner to conduct a study into potential on-train obstacle detection systems. It is clear that DLR is keeping this topic under review and actively seeking solutions.

ORR is aware that this is a complex area and that there are no off-the-shelf technical solutions of this nature currently available. Separately, the Department for Transport has included in the June 2020 round of innovation funding a project[2] to look at this issue. We believe this underscores the fact that this is a technical area that continues to be the subject of research and development and where reliable commercial products do not yet exist.

As indicated earlier the ORR's authority to intervene extends only to circumstances where the duty holder falls short of the legal standards required of them. In the event that a duty holder is in compliance with the minimum standards required by the law, the ORR is able to provide advice and guidance but is *not* in a position to take any enforcement action. In essence the ORR's ability to require change is limited to where the legal requirements are not met by the duty holder.

It is for these reasons that ORR considers that the concerns in the Coroner's report would be better directed to DLR, KAD and TfL. These organisations hold the responsibility for health and safety and have the power to investigate and implement additional or alternative new technological and operational solutions that could reduce further the risks to persons on the track.

Yours sincerely

[redacted]
HM Principal Inspector of Railways

Enc. Extract from DfT research funding re obstruction detection project in Wales

cc. ORR: [redacted]
DLR: [redacted]
Keolis Amey Docklands: [redacted]

2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892665/Competition_Results_-_SBRI_Rail_Demonstrations_-_First_of_a_Kind_2020.pdf ; relevant extract attached to this letter for information as annex A