

CSIRS Outcome Report

Confidential Safety Information Reporting Scheme (CSIRS)

Reported Waratah A & B set door closing logic problem

The issue

The Office of Transport Safety Investigations (OTSI) received a report through its CSIRS concerning a door control software bug on Sydney Trains Waratah A and B sets.

The report detailed that it was possible to accidentally engage the train guard's door control in a way the train doors would close without the door warning device (DWD) activation. In that event passengers would not be provided with an automatic public address (PA) announcement to '*stand clear doors closing*' before the doors closed (the safety issue). While OTSI acknowledged the safety issue was possible through a guard not following the Sydney Trains door closure sequence, it was plausible such a sequence could also occur if a train guard was distracted for any reason when closing the door.

The CSIRS reporter also provided evidence that they had previously communicated the safety concern with Sydney Trains executive with no action being reported back on the outcome of any Sydney Trains investigation into the safety issue.

OTSI action

OTSI provided a CSIRS Safety Notification to Sydney Trains and requested that an investigation into the matter be undertaken and for Sydney Trains to report on other door-related matters.

Operator response

Sydney Trains carried out an investigation into the safety issue and provided additional advice of the safety issue raised including the following:

- Sydney Trains could not find a record of the safety issue being reported internally to its executive management. As such, no prior investigation had been undertaken to verify if the safety issue existed.
- Sydney Trains subsequently confirmed the DWD would not activate on Waratah A & B sets in the event a guard did not follow the standard operating procedure's door closing sequence. That testing confirmed the CSIRS reporter's identification of the safety issue.
- The same door button sequence was also tested on a Millennium and Oscar set with the doors remaining open. The doors would not close until the correct door closing sequence was followed with the DWD then activating and a PA announcement being made to warn of the doors closing.

- The likelihood of a guard closing the doors in a sequence where the DWD would not activate was considered extremely unlikely due to the controls in place (for instance the door control panel design and the standard operating procedures dealing with closing of the doors).
- Sydney Trains advised it had not recorded any rail safety incidents involving the door control system not activating the DWD in the past 5 years.
- Sydney Trains advised there existed several ways an employee could raise safety issues with its management. These ways included the following:
 1. Using the 'Report unsafe conditions' process contained within the Sydney Trains Safety Health Environment Management (SHEM) intranet (Transport Equip) reporting feature.
 2. Reporting standard defects and fault logs via the employee's standard work reporting practices (including reporting on infrastructure such as rolling stock, civil, signals, train control assets, etc).
 3. Raising a safety issue with the relevant line manager or Health Safety Environment (HSE) representative or committee.
 4. Via the Sydney Trains Safety Management Sydney (SMS) workplace complaints and grievances process (if required).
 5. Via the OTSI CSIRS or ATSB REPCON processes.

OTSI noted Sydney Trains undertook the following actions in response to the findings of its investigation.

- Undertook door logic testing on Waratah A & B, Millenium and Oscar sets to determine if the safety issue could be replicated.
- Issued an information bulletin to all train guards advising that passenger bodyside doors can be closed without playing the door warning announcement under certain circumstances on Waratah A & B sets. The bulletin acknowledged the safety issue could only occur when a specific door button sequence was followed which was not in accordance with their TWP 156 Operating Doors procedure. Guards were also reminded to follow the TWP 156 Operating Doors procedure and to immediately report any instances of the DWD not activating.
- Shared the outcomes of its door logic testing with its maintainer. Sydney Trains then initiated the process of requesting for the Waratah A & B set door logic to be updated to address the safety issue.

Conclusion

Sydney Trains took action to investigate the reported CSIRS safety issue, initiate a door logic software update to address the safety issue and advise its train guard staff to follow the TWP 156 Operating Doors procedure. The matter is now closed.

Safety Message

Transport safety workers may identify safety issues during their work and are encouraged to familiarise themselves with the appropriate reporting procedures within their organisation. Reporting safety issues through recognised reporting mechanisms can help ensure they are recorded, reviewed and appropriately actioned.

Sydney Trains transport safety workers are reminded of how they may report safety issues through the multiple reporting mechanisms detailed above.

The Confidential Safety Information Reporting Scheme (CSIRS) operates under the provisions of Section 46E of the Passenger Transport Act 1990. It is a voluntary, confidential and non-punitive scheme that enables employees in the public passenger transport sectors of the rail, bus and ferry industries to report safety matters.

OTSI provides feedback to each reporter on the investigation outcomes of a CSIRS report. In selected matters that have significant operational safety matters, OTSI also publishes a CSIRS Outcome Report. For more information on CSIRS, go to otsi.nsw.gov.au