

CSIRS Outcome Report

Confidential Safety Information Reporting Scheme (CSIRS)

C1021: Long distance passenger train operating with below minimum crew numbers

The issue

On 20 March 2023, the Office of Transport Safety Investigations (OTSI) received a notification via the Confidential Safety Information Reporting Scheme (CSIRS) of a long distance rail passenger service operating with less than the normal requirement of onboard crew stipulated by the operator's Safety Management System (SMS).

The passenger service operated with two active onboard crew members and 177 passengers. The reporter asserted that the service operated with less than the required staff as a result of:

- staff illness, and the inability of the operator to acquire relief staff
- insufficient road coaches to replace the service
- managerial coercion to coax the senior onboard staff member to work the train as a revenue service instead of operating road coaches.

The reporter advised OTSI that there was an operator's procedural document for unplanned staff absences, and for instances which allows for reduced active onboard crew numbers to enable services to continue. The procedure also specifies the minimum number of crew with which a service is permitted to operate.

OTSI action

OTSI contacted the operator in writing with the details of the incident. OTSI raised concerns about the safety of the rail service in the event of an emergency, and fatigue risk assessments for crew working excessive hours and long shifts.

Operator response

The operator provided OTSI with the requested evidence, such as voice recordings, fatigue risk profiles, timesheets for crew and diary entries for operational hubs.

In response to the concerns raised about emergency management, the operator advised that in addition to the two rostered onboard crew there was another qualified crew member onboard the train travelling as a passenger.

This crew member began their shift the night before and agreed to extend to the outbound destination to cover this part of the staff shortage. In accordance with the operator's fatigue

guidelines, this crew member could not be rostered to work on the return service to cover the staff shortage, as they had surpassed 12 hours on duty shortly after arrival at the outbound destination. However, this crew member remained on the return service travelling as a passenger.

The operator advised OTSI that to manage the risk of an emergency they considered it reasonable to request this employee to assist the two rostered crew in an emergency response, should an event arise.

OTSI action

OTSI reviewed the operator's response and their evidence to clarify assertions made by the CSIRS reporter. The response highlighted some areas of improvement for the operator:

- The operator's fatigue risk profiles allowed the crew member to work a 12-hour duty period but prevented them from being rostered for the return service. The crew member was travelling back to their home depot as a passenger. On their arrival, the total time onboard the service was approaching 16 hours. The operator's shift manager advised the train supervisor that this crew member could assist the two rostered crew in an emergency. There was no evidence of a fatigue assessment, or an assessment of the potential impacts of the crew member's performance in the event of an emergency.
- The operator's procedures for unplanned staff absences outlines that a minimum of three active onboard crew members are required to operate a service compared to the normally rostered four onboard crew. There was no evidence that the service was operated on the day in accordance with these procedures. Management rang and consulted with the train supervisor who agreed to operate the service with two active onboard crew members carrying 177 passengers. OTSI acknowledges the operator closed onboard passenger services such as the buffet car to allow crew to focus on passenger safety for the duration of the trip.
- OTSI analysed both the daily and fortnightly Fatigue Audit InterDyne (FAID)¹ scores for the crew member who was travelling as a passenger. The analysis showed a very high fatigue score both on the day, and in the lead up to the day in question. OTSI identified that the operator currently does not capture the real-time FAID scores for operational crew who work extended shifts, unplanned overtime and shift swaps for example. Currently the operator's roster system displays FAID scores for master rostered shifts. The operator's fatigue risk profile states that potentially 20% of shifts extend beyond that of the master roster and that FAID scores are monitored by the rostering officer but did not provide any guidance on how this monitoring was to be executed.
- Operationally, OTSI observed that the operator's procedures specify that should a driver's safety system fail enroute, a qualified worker is required to travel with the driver in the driver's compartment. In this instance this qualified worker would have been in the form of an onboard crew member. This would potentially leave a single active crew member to handle any arising situations from within the passenger saloon area on this journey, as the crew member travelling as a passenger would be deemed to not be on duty.

OTSI's analysis of the evidence identified opportunities for improvement with the operator's fatigue risk profile, use of FAID and the accuracy of actual shifts recorded by the operator's rostering

¹ FAID is a human factors tool designed to give an indicative score of fatigue levels by persons working various shifts.

system. This triggered a meeting between the operator and OTSI to discuss opportunities for improvement in the management and monitoring of real-time FAID scores.

The operator supplied a statement and voice recordings to OTSI in response to the claims of managerial coercion towards onboard staff. The statement from the onboard staff member outlined that at no point did they feel pressured or coerced to work the train as a revenue service while short-staffed.

Although there is evidence of some consideration of the risk and the redistribution of duties to the available onboard staff, risk management principles require that a decision to deviate from an established safe practice should be supported by a formal decision framework that records the assessment of the risk, the risk mitigation strategies, consultation with workers and approval by an authorised officer of the operator.

Conclusion

As a result of the operator's own incident investigation, CSIRS report and OTSI action, the operator agreed to address the key safety issues that were raised as a result of the event.

The operator subsequently advised that prior to the receipt of the CSIRS that they had already commenced internal processes with frontline employees relating to the following:

- The operator will explore and trial processes to capture and monitor real-time FAID scores and make them visible to crew and management.
- The operator will review, in consultation with relevant stakeholders, the procedure for minimum onboard staff as a result of unplanned staff absences.

Real-time FAID score visibility will allow crew and management to monitor fatigue more accurately and therefore make more informed decisions relating to fatigue.

OTSI acknowledges the operator's intention to address the above safety actions and will follow up with the operator to monitor progress on those actions.

OTSI understands that the intent of the operator's onboard supervisor's decision was to avoid passenger delays, however passenger train operators are reminded that the safety of passengers and staff is paramount in any decision to deviate from the operator's established safety processes.

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