

Confidential Safety Information Reporting Scheme

Phoenix Train Order System

A report from an employee of Australian Rail Track Corporation (ARTC) was received about the implementation Phoenix Train Order System to network control management.

ARTC network control management are in the process of implementing the Phoenix Train Order System (PTOS). This has already been postponed for 12 months due to safety concerns. The new implementation date is 14 April 2016 and the system is still unsafe. All of the controllers who are currently learning the new system have many safety concerns. Multiple safe working breaches and incidents are highly likely. We have gone to management in regards to our concerns with this new system and have not had our concerns addressed.

One major issue is that controllers have been told that they will need to 'trick the system' so that trains don't exist in order to perform certain shunt movements (e.g. at Merrygoen). Once PTOS is implemented, Special Proceed Authority (SPA) working will be the permanent form of safeworking for certain train movements beyond Narromine. This is due to the length of trains that will not fit in to a smaller yard (like Narromine).

Other problems exist with the proposed safeworking arrangements for Dubbo yard and for Merrygoen.

A smaller issue, but one that the potential to affect safety, is the actual layout of the new safeworking form. There are problems with the boxes on the TOA form. Also, the size of the font does not meet standards, it is difficult to work with, the issue has been raised but it looks like it will not be changed before we go live.

CSIRS Requirement

As part of the OTSI investigation, a Safety Valve Notification was issued to ARTC asking them to address these concerns and provide OTSI with the results of its findings and any remedial safety actions deemed necessary.

Investigation outcome

ARTC advised that they had investigated the claim made by the reporter and they provided details of their investigation. An extract of this response follows.

The claimant attests that the postponement of the project was due to safety concerns. The postponement was due to the inability of the contracted party failing to deliver the project within the initial timeframe and with acceptable delivery of system features including safety features. During testing these defects were identified and the contractor has continued to work on the project, in particular

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focusing on defects found during the initial delivery of the system. The system was not accepted at the time because of the issues discovered in acceptance testing. Network controllers were part of the process of identifying if the system performed as required and based in part on their feedback the system was not accepted.

ARTC has and will continue to follow change management as described in our Safety Management System. This process includes the validation and certification of engineering systems by internal and external competent parties. Currently the system is with our external contractor to verify functional safety including validating the SIL rating. Once this has been received and our internal validation and certification is received it will progress to the Office of the National Rail Safety Regulator (ONRSR) as a variation to our accreditation. ONRSR have already been involved during the development of the system.

The claimant has noted a number of safety concerns in relation to the use of PTOS. It must be noted that these could only have been raised whilst during testing. It is normal for any testing to discover issues; these are captured and rectified as part of the research, design and development of the product. ARTC can state that all feedback made during this stage was logged and will be rectified except for the Narromine issue (see below).

The safety concern raised on Special Proceed Authority (SPA) has been identified as part of the project. For context there are a small number of long intermodal trains (about three in each shutdown of which there are only 4 per year) that are rerouted through Narromine due to Hunter Valley shutdowns. ARTC will initially use SPA working at Narromine with a new signal layout at Narromine being designed and will be commissioned in the 16/17 year which will eliminate this issue.

OTSI Action

The outcomes of the inquiries made by both OTSI and ARTC have been recorded in the OTSI Safety Investigation Database for future review and trend analysis. ONRSR have been advised of the issues raised by the reporter and the response by ARTC.