

OTP exclusion zone lighting systems

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Overview

Recently, there have been many articles relating to lighting systems fitted to On Track Plant. These lights are blue lamps projecting beam patterns to depict exclusion zones on the ground. These systems have not been reviewed through the Product Approval process, and therefore should not be used.

The fitment of blue lights for this purpose, particularly to OTP Excavator Cranes, has a high potential to be confused with the requirements of RIS-1530-PLT Issue 6 Clause 9.7.2.1 'there shall be a continuous blue light fitted externally to the machine, visible to site personnel under all foreseeable lighting conditions and illuminated when the RCI is in lifting mode'.

Extra blue lamps fitted to the exterior of a cab or superstructure could mask an event where the RCI was disengaged. This is quite pertinent as there have been several recent events where OTP has overturned due to the RCI being set in the wrong configuration.

(Note: RIS 1530 PLT Iss6 G5.15.1.9. Only lighting that is called up in this document is allowed to be displayed, so that there is one national agreed list of exactly what and why an external visible indication is given by any machine.)

Underlying causes

- Lack of understanding of Product Approval process.
- Lack of understanding of Engineering change process.
- Lack of understanding for the application of relevant standards relating to plant design.

Key message

As with other Proximity Warning systems these systems require Product Acceptance to permit the use on Network Rail Managed Infrastructure. Network Rail strongly support developing innovations such as this when managed correctly.

It is acknowledged that the development of these systems has been with the best intentions to attempt to address exclusion zone adherence. The Product Acceptance process would enable developers and innovators to demonstrate safety, compliance and engineering issues have been considered and relevant requirements met.