



# Critical Incident Notification

## Electrical Conductor Rail Burnout

A high potential incident has occurred in connection with our operations where a conductor rail system failed, leading to a burnout and potential fire. This is an opportunity to reflect on this incident and take necessary actions to help prevent similar occurrences.

**Date of incident:** 2015-11-05

**Country:** United Kingdom

**Site:** Eastleigh Rail Depot

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Employee | <input checked="" type="checkbox"/> Contractor | <input type="checkbox"/> Third Party / Member of the Public |
| <input checked="" type="checkbox"/> On-Site  | <input type="checkbox"/> Off-Site              | <input type="checkbox"/> Transport                          |

### What we know so far:

On the 5<sup>th</sup> November 2015 at 0120hrs a contract electrician was called to reset an overload feeding a rail discharge conveyor. A short while after restarting the conveyor the electrician noticed sparks and smoke emanating from the conveyor.

The system was immediately isolated and following inspection a failure on the AKAPP conductor rail, between the pickup trolley and conductor rail was identified.

The conductor rail system has been in operation for approximately 30 years, visual external inspections are carried out on a 6 monthly basis in accordance with the ESMS; however there is no proactive PPM maintenance scheme in operation, historically repairs to the system are undertaken following failure.

The pickup trolley brushes were found to be in good condition; however the conductor rails were heavily corroded, poorly aligned and caked in carbon.

### Immediate actions taken by country leadership:

- ESMS and BV inspections do not cater for planned preventative maintenance (PPM) requirements
- PPM arrangement should be established at a site level in accordance with manufacturer's recommendations (along with site experience) for all electrical equipment, especially items such as conductor rail systems which consist of wearing parts
- There must be a clear and documented strategy (site level) for ongoing replacement of equipment reaching the end of its serviceable life
- Conductor rail systems should be protected by earth leakage devices
- Consider the use of a cleaning tool to ensure carbon build up and corrosion is kept to a minimum
- Routine 6 monthly thermographic surveys may be able to detect hot spots on some systems assisting with early failure identification



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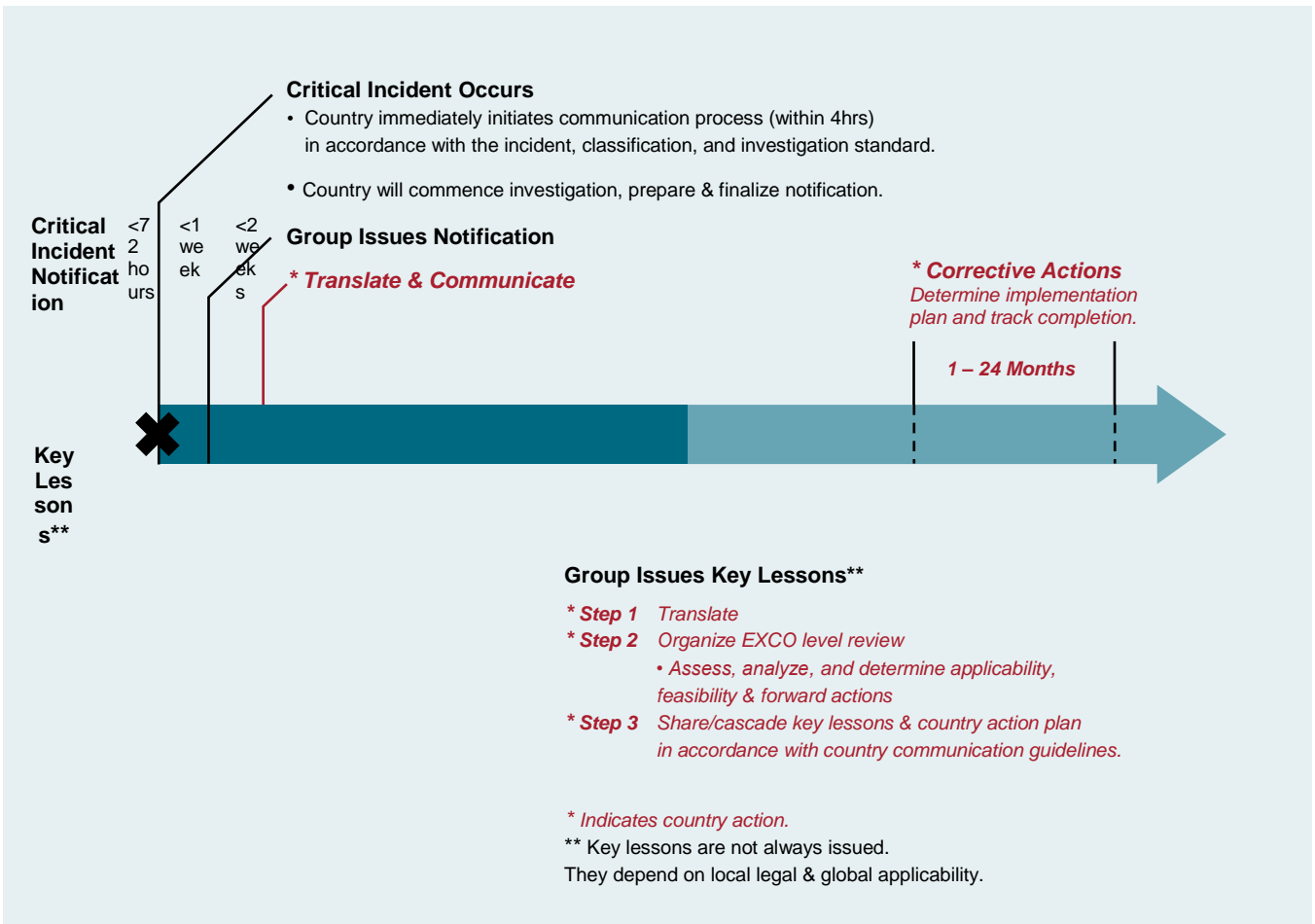
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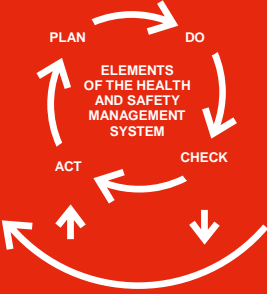


## Communication Principles



- Determine a country-wide process for distribution of this document, including appropriate corrective actions for all levels of the organization.
- Communication should include discussions in team meetings, toolbox talks, posting on notification boards, e-mail distribution, and developing and sharing relevant action plans

## Important Actions



- Perform a gap analysis based on the information in this document.
- Establish the action plan, including objectives and processes necessary to ensure that a similar incident will not occur at your sites.
- Implement the action plan, execute the process, close the gaps.
- Collect data to track implementation until completion