

Category 2 Standard

S2533

(Formerly E7060)

Routine Change Periods for Signalling Assets

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1 Purpose

- 1.1 This document details the routine change interval for signalling equipment, with potentially unsafe failure modes due to progressive degradation, that cannot be satisfactorily addressed by maintenance and testing of the equipment at its installed position. This is a requirement of engineering standard S1199, Signalling and Signalling Control – Operation and Maintenance.
- 1.2 The business objective of the standard is to ensure a railway where safety risks are as low as reasonably practicable (ALARP).

2 Scope

- 2.1 This standard applies to the signalling assets detailed in section 3.1.
- 2.2 This standard supersedes E7060- A1 and TLL-ENG-S7248-A2, which are withdrawn.

3 Requirements

3.1 Routine Change Periods

- 3.1.1 The signalling assets shall be routine changed at the intervals defined below. The interval between installation and replacement shall not exceed the defined interval by more than one year. At the discretion of the Asset Steward, routine change may be carried out more frequently than the mandated interval.

Note: The availability of the signalling system may be improved by early replacement of key assets, particularly where usage is a significant factor in terms of reliability.

3.1.1.1 Relays

All the following relays shall be routinely changed on a 10 year cycle.

- 1. 100V 125 Hz and 33 $\frac{1}{3}$ Hz:
 - a) DEV (Track & Line)
 - b) SEV
 - c) WKR (3 position)
 - d) BG gravity biased
 - e) JR (LT&N Style).
- 2. 100V Frequency Relay (FR)
- 3. 60V F3 style DC
- 4. Q Style Relays that have no diverse protection (with the exception of GR, PGR and FPGRs).

Note 1: Installations using twin Q relays in a redundant configuration are not required to be routine change on safety grounds because the circuit design provides sufficient protection against wrong side failures.