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Warning Lights

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About This Standard

This principle addresses the minimum requirements of all fixed train activated warning light systems provided for the purpose of warning persons on, or near the track.

Document History

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List of Amendments –

ISSUE	DATE	CLAUSE	DESCRIPTION
1.1	01/09/2004		<ul style="list-style-type: none">▪ Reformatting to ARTC Standard
1.2	14/03/2005	Disclaimer	<ul style="list-style-type: none">▪ Minor editorial change▪ Footer reformatted

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20 Warning Lights

20.1 Principle no 20.1 - Train activated warning lights

20.1.1 Introduction

This principle addresses the minimum requirements of all fixed train activated warning light systems provided for the purpose of warning persons on, or near the track.

20.1.2 Requirements-provision of warning lights

Fixed warning lights are provided adjacent to running lines in order to provide adequate warning of the approach of rail traffic to all authorised persons required to walk or carry out work on or near parts of the track where only a limited safe place (as described in SWU 910) is available. These areas include entrances to tunnels, tunnels, walkways along or across railway lines and other areas where there is only limited visibility.

20.1.3 Form of Warning Lights

- In the City Underground area, or where specifically approved due to possible conflict with other adjacent white lights, the warning light shall be rectangular "**yellow**" light.
- In all other areas warning light shall be round "**white**" light.
- Notice plate inscribed "**Warning light**" with the name of the **applicable line**, shall be displayed with warning lights.
- Warnings shall be provided for:

The approach of any train from any normal running direction, on the applicable line.

- Employee Crossings:
- A sign "**Light Out indicates train approaching**" shall be displayed.
- Where used across double tracks, a separate warning light for each track shall be provided clearly marked with the track to which it applies. An additional sign "**Do not cross unless both lights are showing**" shall be provided.
- Warning lights are **not** to be provided for installation at more than 2 tracks in the one crossing. For such installation, normal pedestrian crossing arrangements shall be considered.

20.1.4 Positioning

- Warning lights shall be positioned immediately adjacent to the track to which they apply and on the left hand side in the normal running direction.
- Spacing shall be such that at least one light is clearly visible from any point adjacent to the track.
- Warning lights shall not be placed on signals.
- Warning lights shall not be positioned close to signals in such a way that a driver may misread a warning light for a signal or the warning light reduces the visibility of the signal.

20.1.5 Warning time

The initiation of the warning shall allow an absolute minimum of 20 seconds or sufficient time for any user to reach a safe place before the arrival of a train. Designs shall be based on 30s warning unless additional time is required to reach a safe place.

20.2 Warning Light Controls

Warning lights shall be designed to operate in a failsafe mode so that an absence of indication is considered as a warning. Separate warning lights shall be used for separate tracks unless specifically approved otherwise.

The warning given by the system shall be initiated by the detected approach of any rail traffic movements routed towards the protected area, and shall be maintained until such time as all those movements are detected as being clear of the protected area. Operation of the warning lights shall be automatic and not require any action by the signaller.

Fail safe means of train detection shall be used. Failure of train detection equipment shall ensure that the system is maintained in a "warning" state.

20.2.1 Signal Operated Controls

When the track controlled approach area of the warning light extends past a controlled signal, the signal may qualify the warning light control as follows:

- If the signal is close to the protected area, the warning light shall extinguish on train approach to the signal, and after a route time release and the signal remaining at stop, the warning light may be then illuminated.
- If the signal is a distance from the protected area the warning may be suppressed if a train approaches and the signal is at stop.
- If a signal is to be cleared with a train on the approach, design shall ensure sufficient warning is given.

20.3 Sighting Committee

When a request for installation of warning lights is received by the District Signal Engineer, a sighting committee shall be convened and sign off on the placement of warning lights. The committee shall consist of:

- District Signal Engineer
- Designer
- Representatives from on-track staff who may use the warning light
- Any other parties who may use the warning light

The Committee shall consider:

- Availability of safe place
- the time taken for staff to move to the safe place
- the area the warning light is to protect
- the directions from which trains may approach
- sighting of the warning light
- possible misreading of the warning light
- possible conflicts with background lighting 0