

Design Manual for Roads and Bridges



Road Layout
Maintenance & Operation

CM 125

Maintenance of traffic signs

(formerly TD 25/15)

Revision 1

Summary

This document sets out the requirements for the maintenance of permanent traffic signs.

Application by Overseeing Organisations

Any specific requirements for Overseeing Organisations alternative or supplementary to those given in this document are given in National Application Annexes to this document.

Feedback and Enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated Highways England team. The email address for all enquiries and feedback is: Standards_Enquiries@highwaysengland.co.uk

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Release notes

Version	Date	Details of amendments
1	Mar 2020	Revision 1 (March 2020) Revision to update references only. Revision 0 (December 2019) CM 125 partially replaces CS 125 revision 0. It contains the requirements for the maintenance of permanent traffic signs which are applicable to the maintenance and operation lifecycle stage. This full document has been written in compliance with the new Highways England drafting rules.

Foreword

Publishing information

This document is published by Highways England.

This document partially supersedes CS 125 revision 0, which is withdrawn.

Contractual and legal considerations

This document forms part of the works specification. It does not purport to include all the necessary provisions of a contract. Users are responsible for applying all appropriate documents applicable to their contract.

Introduction

Background

Requirements and advice for the inspection, maintenance and disposal of traffic signs are defined in this document, CS 125 [Ref 2.N] and CZ 125 [Ref 1.N].

Traffic signs facilitate the safe use and effective operation of the highway by communicating directions, warnings, regulations and other information to road users. Inspection, maintenance and disposal of traffic signs are necessary because:

- 1) traffic signs are subject to legislation and their legal status, or that of an associated statutory provision, can be affected if there is a failure in the performance of a traffic sign or associated equipment;
- 2) over-provision of traffic signs can have a negative visual impact on the environment and can have a detrimental impact on comprehension by road users where there is an overload of information;
- 3) the visual performance of traffic signs reduces during the hours of darkness and degrades over time, reducing conspicuity and legibility;
- 4) impairment of the visibility and legibility of traffic signs can be detrimental to road safety by distracting road users and/or hindering drivers' uptake of vital information;
- 5) deterioration of supporting structures and electrical installations can occur, potentially becoming hazardous to road users, road workers and/or other parties;
- 6) rectification of defects and preventive maintenance are key to a traffic sign installation achieving its design life.

Further guidance on the reasons for inspecting, maintaining and disposing of traffic signs can be found in sections 8 and 9 of TSM Chapter 1 [Ref 5.N].

Assumptions made in the preparation of this document

The assumptions made in GG 101 [Ref 3.N] apply to this document.

Abbreviations

Abbreviations

Abbreviation	Definition
TSM	Traffic Signs Manual

Terms and definitions

Terms

Term	Definition
Associated equipment	All items, other than traffic signs, necessary to form a complete traffic sign installation and can include items such as traffic sign posts, lighting units and electrical installations.
Traffic sign	The meaning given by section 64(1) of the Road Traffic Regulation Act 1984 (RTRA 1984 [Ref 4.N]) although, for the purposes of this document, does not include road markings or road studs.

1. Scope

Aspects covered

- 1.1 This document shall be used for the maintenance of permanent traffic signs.
- 1.2 This document shall be read in conjunction with CS 125 [Ref 2.N] (inspection of traffic signs) and CZ 125 [Ref 1.N] (disposal of traffic signs), which contain related requirements and advice for traffic signs that have been installed and are in use.
- 1.3 The requirements in this document shall apply to all traffic signs, together with associated equipment, in permanent use on motorway and all-purpose trunk roads except:
- 1) road markings and road studs within the scope of CS 126 [Ref 1.];
 - 2) structures within the scope of CS 450 [Ref 2.];
 - 3) lighting columns.

NOTE Traffic signs mounted on structures within the scope of CS 450 [Ref 2.] or mounted on lighting columns remain within the scope of this document.

- 1.4 Users of this document shall establish the processes, procedures and frequencies of the maintenance activities needed to meet the requirements of this document.

Implementation

- 1.5 This document shall be implemented forthwith on all schemes involving the inspection and maintenance of permanent traffic signs on the Overseeing Organisations' motorway and all-purpose trunk roads according to the implementation requirements of GG 101 [Ref 3.N].

Use of GG 101

- 1.6 The requirements contained in GG 101 [Ref 3.N] shall be followed in respect of activities covered by this document.

2. Rectification of defects

General

- 2.1 Where a traffic sign defect has been identified and categorised during the inspection of traffic signs, and in the absence of an overarching contractual requirement of the Overseeing Organisation, the defect shall be rectified in accordance with the timescales in Table 2.1.

Table 2.1 Rectification of defects

Category	Description	Rectification time
Critical	A defect which requires prompt attention because it represents an immediate or imminent safety hazard, or there is a breach of statutory duty.	<p>For a safety hazard:</p> <ol style="list-style-type: none"> 1) make safe at the time of identification or as soon as reasonably practicable thereafter; 2) temporary repair within 24 hours; 3) permanent repair within the timescales defined in the applicable maintenance contract or, if no such requirements exist, 28 days. <p>For a breach of statutory duty:</p> <ol style="list-style-type: none"> 1) permanent repair as soon as reasonably practicable.
Non-critical	All other defects	Permanent repair within 6 months.

NOTE 1 CS 125 [Ref 2.N] defines the requirements for the inspection of traffic signs, including the identification and categorisation of defects.

NOTE 2 The criteria in Table 2.1 allow the severity and likelihood of any risk to the safety of road users, road workers and other parties, and the effective operation of the highway to be taken into account in the rectification of defects.

Warranties

2.2 Where a defect is attributable to a failure by a manufacturer, supplier or installer, any remaining warranty shall be enforced.

3. Maintenance

Traffic sign face cleaning

3.1 Each traffic sign shall be cleaned at a frequency that is commensurate with the rate at which dirt and vegetation builds-up on the traffic sign face.

NOTE Loss of legibility and permanent damage to traffic sign faces can occur if cleaning is not carried out at sufficiently frequent intervals.

3.1.1 The interval between the cleaning of each traffic sign should not exceed the values given in Table 3.1.1.

Table 3.1.1 Recommended maximum interval between traffic sign cleaning

Traffic sign location	Recommended maximum interval between traffic sign cleaning
Traffic signs mounted above the carriageway (i.e. on gantries)	6 years
Other traffic signs	3 years

3.1.2 Traffic signs should be cleaned more frequently than identified in Table 3.1.1 where they are susceptible to an increased build-up of vegetation or dirt on the traffic sign face.

NOTE Traffic signs can be susceptible to an increased build-up of vegetation or dirt on the traffic sign face where they are positioned:

- 1) in close proximity to vegetation;
- 2) in an area subject to persistent shading;
- 3) at a low mounting height;
- 4) in a tunnel environment.

3.2 The cleaning instructions of the traffic sign face or retroreflective sheeting supplier shall be followed to ensure that cleaning methods and materials do not cause damage to the traffic sign face.

NOTE Traffic sign faces can be damaged by inappropriate cleaning with abrasive materials.

3.3 Where traffic signs with a dew resistant overlay or coating require cleaning, only clean water from a low-pressure hose shall be used unless alternative cleaning methods and materials are permitted by the supplier's cleaning instructions.

3.4 The cleaning of traffic signs shall be conducted so that associated equipment, such as traffic sign lighting, is not damaged.

Mechanical traffic signs

3.5 Mechanical elements of traffic signs, such as rotating prism-type variable message traffic signs, shall be serviced and maintained in accordance with the requirements of the manufacturer's operation and maintenance manual.

Traffic sign post maintenance

3.6 The need for traffic sign post maintenance shall be identified through the inspections described in CS 125 [Ref 2.N].

NOTE Traffic sign post maintenance can include the repainting of posts and the restoration of protective measures.

4. Records

Records

- 4.1 Records of the maintenance of each traffic sign shall be maintained, including details of any action taken or required.
- 4.2 In the absence of an overarching contractual requirement of the Overseeing Organisation, records of maintenance shall be retained for a minimum of seven years.
- 4.3 In the absence of an overarching contractual requirement of the Overseeing Organisation, retained records shall be handed over to the Overseeing Organisation at the end of any contract which includes the requirements of this document.
- 4.4 In the absence of an overarching contractual requirement of the Overseeing Organisation, any database, drawing or model of as-installed traffic sign assets shall be updated within one month of a change which affects the information shown in the database, drawing or model.

5. Normative references

The following documents, in whole or in part, are normative references for this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Ref 1.N	Highways England. CZ 125, 'Disposal of traffic signs'
Ref 2.N	Highways England. CS 125, 'Inspection of traffic signs'
Ref 3.N	Highways England. GG 101, 'Introduction to the Design Manual for Roads and Bridges'
Ref 4.N	RTRA 1984, 'Road Traffic Regulation Act 1984'
Ref 5.N	The Stationery Office. TSM Chapter 1, 'Traffic Signs Manual Chapter 1 - Introduction'

6. Informative references

The following documents are informative references for this document and provide supporting information.

Ref 1.1	Highways England. CS 126, 'Inspection and assessment of road markings and road studs'
Ref 2.1	Highways England. CS 450, 'Inspection of highway structures'

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Road Layout
Maintenance & Operation

CM 125

England National Application Annex to CM 125 Maintenance of traffic signs

(formerly TD 25/15)

Revision 0

Summary

There are no specific requirements for Highways England supplementary or alternative to those given in CM 125.

Feedback and Enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated Highways England team. The email address for all enquiries and feedback is: Standards_Enquiries@highwaysengland.co.uk

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Release notes

Version	Date	Details of amendments
0	Dec 2019	Highways England National Application Annex to CM 125.

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Design Manual for Roads and Bridges



Road Layout
Maintenance & Operation

CM 125

Northern Ireland National Application Annex to CM 125 Maintenance of traffic signs

(formerly TD 25/15)

Revision 0

Summary

This National Application Annex contains the Department for Infrastructure, Northern Ireland specific requirements for maintenance of traffic signs.

Feedback and Enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated team in the Department for Infrastructure, Northern Ireland. The email address for all enquiries and feedback is: dcu@infrastructure-ni.gov.uk

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Release notes

Version	Date	Details of amendments
0	Dec 2019	Department for Infrastructure, Northern Ireland National Application Annex to CM 125.

Foreword

Publishing information

This document is published by Highways England on behalf of Department for Infrastructure, Northern Ireland.

This document partially supersedes CS 125 revision 0, which is withdrawn.

Contractual and legal considerations

This document forms part of the works specification. It does not purport to include all the necessary provisions of a contract. Users are responsible for applying all appropriate documents applicable to their contract.

Introduction

Background

This National Application Annex contains the Department for Infrastructure, Northern Ireland specific requirements related to maintenance of traffic signs.

Assumptions made in the preparation of this document

The assumptions made in GG 101 [Ref 1.N] apply to this document.

NI/1. Applicability of CM 125 in Northern Ireland

NI/1.1 The requirements in CM 125 shall not apply in Northern Ireland.

NI/1.1.1 The Department for Infrastructure should be contacted for further guidance and advice related to the maintenance of traffic signs.

NI/2. Normative references

The following documents, in whole or in part, are normative references for this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Ref 1.N	Highways England. GG 101, 'Introduction to the Design Manual for Roads and Bridges'
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Road Layout
Maintenance & Operation

CM 125

Scotland National Application Annex to CM 125 Maintenance of traffic signs

(formerly TD 25/15)

Revision 0

Summary

There are no specific requirements for Transport Scotland supplementary or alternative to those given in CM 125.

Feedback and Enquiries

Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated Transport Scotland team. The email address for all enquiries and feedback is: TSSStandardsBranch@transport.gov.scot

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Release notes

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Road Layout
Maintenance & Operation

CM 125

Wales National Application Annex to CM 125 Maintenance of traffic signs

(formerly TD 25/15)

Revision 0

Summary

There are no specific requirements for Welsh Government supplementary or alternative to those given in CM 125.

Feedback and Enquiries

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