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Transport Infrastructure Ireland

TII Publications



Temporary Safety Measures Inspection

CC-STY-04002
December 2017

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**Updates to TII Publications resulting in changes to
Temporary Safety Measures Inspection CC-STY-04002**

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Amendment Details:

This Standard supersedes the December 2014 version of CC-STY-04002. The principle changes are outlined below:

- a) The Introduction has been standardised in line with the other road safety Standards.
- b) The Definitions have been updated.
- c) Section 2.4 Notification Process has been updated to require at least 7 days' notice prior to implementation of Temporary Safety Measures.
- d) Section 2.5 Occurrence of Safety Inspection has been revised to differentiate between Road Works in operation for a duration in excess of 12 hours and those in operation for less than 12 hours.
- e) A requirement for Temporary Safety Measure Inspections during hours of darkness where appropriate has been included in Section 2.5.
- f) Appendix A has been added to provide worked examples for determining the most applicable frequency of inspection required for sample types of Road Works.
- g) Section 2.7 Inspection Reporting has been added to the document.

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1. Introduction

1.1 General

The objective of this Standard is to establish an inspection system for Temporary Safety Measures applying to Road Works, to ensure that the Standards applying to the design and implementation of Temporary Safety Measures at Road Works which are referenced below, are properly applied, and to record possible impacts on the safety of traffic flow.

This Standard outlines the requirements for Temporary Safety Measures Inspections in the management of road safety on the Irish national road infrastructure. It describes the roles and responsibilities of those engaged in the management of road safety and it outlines the procedures to be followed to address the requirements of the EU Directive 2008/96/EC on Road Infrastructure Safety Management (RISM) and its transposition into Irish Law under SI 472 of 2011.

This Standard shall ensure that individual Road Authorities, Road Operators and Statutory Undertakers set out a process within their Safety Management System requirements that facilitates the implementation of this Standard.

This Standard does not provide information on the design and implementation of Temporary Safety Measures. Reference should be made to the following documents for guidelines applicable to the design and implementation of Temporary Safety Measures:

- Chapter 8 of the Traffic Signs Manual published by the Department of Transport, Tourism and Sport.
- Guidance for the Control and Management of Traffic at Road Works issued jointly by Local Authorities, the National Roads Authority (now Transport Infrastructure Ireland), the Department of Transport, Tourism and Sport and by the Local Government Management Services Board.
- Temporary Traffic Management Guidance Handbook for Traffic Signs Related Works and Road Marking Related Works Dashboard Manuals published by the National Roads Authority (now Transport Infrastructure Ireland).

Standardisation of the reporting format for the Temporary Safety Measures Inspections is desirable for the following reasons:

- It indicates to the inspection team the quantity and quality of the information required;
- It enables Transport Infrastructure Ireland (TII) to directly compare common report information;
- It enables TII to monitor where certain issues are reoccurring from inspection to inspection;
- It enables easier monitoring of the quality and consistency of these inspections.

The standard report format is available for download from the TII website at the following link <http://www.tii.ie/tii-library/road-safety/>.

1.2 Scope

This Standard sets out the procedures required to implement Temporary Safety Measures Inspections on national roads. The standard is applicable to all Road Works carried out on national roads.

1.3 Definitions

Authority:

For National Roads the Authority is Transport Infrastructure Ireland (TII).

Road Works:

Occur where the normal function of the public road used by any road user, including non-motorised users, is affected or interrupted at any time to facilitate the construction or maintenance of the public road, public or private utilities or any adjoining or overhead sites.

Road Operator:

A Road Operator is defined as a company undertaking construction, maintenance or operation of a National Road under a contract agreement with the Authority, and in circumstances where direct responsibility for the construction, maintenance or operation of the section of road has been transferred to the company. A Road Operator may be appointed under a Public Private Partnership or other form of contract with the Authority.

Safety Management System:

The Safety, Health and Welfare at Works Act, 2005 requires an employer to provide systems of work that are planned, organised, performed, maintained and revised as appropriate so as to be, so far as is reasonably practicable, safe and without risk to health.

Statutory Undertaker:

Means the parties involved in conducting media or apparatus for water, sewage, electricity, gas, oil, telecommunications, data, steam, air, or other services, and associated apparatus or structures, together with any privately owned services.

Temporary Safety Measures Inspection:

An inspection of Temporary Safety Measures at road works to ensure that standards on Temporary Safety Measures at road works are properly applied.

Temporary Safety Measures Inspector:

For the purposes of this Standard, the Temporary Safety Measures Inspection shall be carried out by a competent inspector meeting the current TII training and experience requirements for Temporary Safety Measures Inspections as detailed in CC-STY-04005 Inspection Qualifications for Temporary Safety Measures Inspections.

The relevant body outlined in Section 2.3 of this document is responsible for the appointment of a competent Temporary Safety Measures Inspector.

2. Temporary Safety Measures Inspection

2.1 General

Temporary Safety Measures Inspections shall apply to all national roads, except as noted in Paragraph 2.2.

2.2 Exemption

This Standard does not apply to road tunnels which are covered by Directive 2004/54/EC of the European Parliament, but road works on the approaches to tunnel portals may be inspected.

2.3 Scope of Temporary Safety Measures Inspection

The primary purpose of a Temporary Safety Measures Inspection is to ensure that the standards applying to Temporary Safety Measures at Road Works are properly applied and to record possible impacts of Road Works on the safety of traffic flow.

Temporary Safety Measures Inspections shall be undertaken by the relevant bodies as follows:

- Transport Infrastructure Ireland will undertake inspections of Temporary Safety Measures on projects sanctioned/or procured by the Authority.
- Local authority will undertake inspections of Temporary Safety Measures on projects sanctioned and / or procured by the local authority.
- Statutory Undertaker / Road Operator will undertake inspections of Temporary Safety Measures on projects under their management.

Transport Infrastructure Ireland will carry out random inspections of Local Authority, Road Operators and Statutory Undertaker's Temporary Safety Measures to verify that Temporary Safety Measures Inspections are being carried out in accordance with this Standard.

The Temporary Safety Measures Inspection shall inspect the sections of Road Works that impact upon road users and the immediate approaches to Road Works shall also be inspected.

2.4 Notification Process

All Road Works that include Temporary Safety Measures on National Roads shall be registered on the TII Temporary Safety Measures web based database at least seven days prior to implementation. Requests to register for access to this website should be submitted by email to tsmi@tii.ie.

2.5 Occurrence of Safety Inspection

The Directive states that “Member States shall ensure that safety inspections are undertaken ...”. The Regulations state:

- *Safety inspections shall comprise periodic inspections of the road network, and.....be sufficiently frequent to safeguard adequate safety levels for the road infrastructure in question;*
- *Member states shall adopt guidelines on temporary safety measures applying to road works.*

For static Road Works requiring full time Temporary Safety Measures that remain in operation for a duration in excess of twelve hours, the frequency of inspections of the Temporary Safety Measures shall be subject to the minimum requirements contained in Table 2.1.

Table 2.1 Frequency of Inspections for Static Road Works in operation for a duration in excess of 12 hours

| Duration of Road Works | % of sites to be inspected per annum | Frequency of Inspection |
|--|--------------------------------------|-------------------------|
| Exceeding 1 year in duration | 100% of sites to be inspected | Quarterly |
| 6 months to 1 year in duration | 100% of sites to be inspected | Two Inspections |
| 1 month to 6 months in duration | 50% of sites to be inspected | Single Inspection |
| Greater than 12 hours, less than 1 month in duration | 10% of sites to be inspected | Single Inspection |

For Road Works requiring Temporary Safety Measures that remain in operation for a duration of up to twelve hours, the frequency of inspections of the Temporary Safety Measures shall be determined using Table 2.2. These Road Works are typically short duration maintenance type works and the frequency of inspections should be calculated based on the duration of the Contract subject to the minimum requirements contained in Table 2.2. The duration of the Contract may refer to a Call-off Contract dependent on the nature of the works.

Table 2.2 Frequency of Inspections for Road Works in operation for a duration of up to 12 hours

| Duration of Contract | Frequency of Inspection |
|----------------------------------|---------------------------|
| Exceeding 6 months in duration | Six Inspections per annum |
| 3 months to 6 months in duration | Four Inspections |
| Less than 3 months in duration | Single Inspection |

Where a relevant body (see Section 2.3) has responsibility for the maintenance of a region, it shall ensure a minimum of 12 inspections are undertaken annually per region, spread across the various maintenance activities and at different locations within their region.

For reactive emergency maintenance or repair works with Temporary Safety Measures that remain in operation for a duration of up to twelve hours e.g. Statutory Undertaker emergency repair works, the frequency of inspections of the Temporary Safety Measures shall be completed at random.

It is the responsibility of the relevant body outlined in Section 2.3, to outline in their Safety Management System how the frequency of inspection requirements outlined in this document are applied to works under their control.

The frequencies listed above are the intended minimum intervals; however, there may be circumstances where it is advisable to increase the frequency of inspections. The frequency of additional inspections shall be determined by the relevant body. Circumstances where that might arise are:

- On very busy strategic routes, such as the M50;
- Where major incremental changes have been made to the Temporary Safety Measures.

Where a high proportion of Road Works are being undertaken during the hours of darkness or where Temporary Safety Measures remain in place overnight, the relevant body shall ensure an appropriate proportion of the total number of inspections required per annum are completed during hours of darkness. This is to ensure the measures are appropriate from a road user's point of view traveling through the works at night time and sufficient to protect road workers.

Table 2.3 is provided for guidance on the application of the frequency of inspection requirements contained in Tables 2.1 and 2.2 for a number of sample contract types. Worked examples are provided in Appendix A.

Table 2.3: Guidance for the Application of Tables 2.1 and 2.2 for Sample Road Works Types

| Duration of Road Works | Type of Road Works | Frequency of Inspection |
|------------------------|--|-------------------------|
| In excess of 12 hours | Major Road Works | Table 2.1 |
| | Minor Improvement Schemes e.g. realignment, widening, junction improvements | |
| | Road Safety Improvement schemes | |
| | Utility Installation e.g. laying water mains | |
| | Upgrade works e.g. filter drain renewal works | |
| | Resurfacing works | |
| | Pavement Overlay/Inlay Schemes and Resurfacing works | |
| | Eirspan bridge rehabilitation works such as parapet replacement and deck renewal | |
| Up to 12 hours | Grass/Hedge Cutting | Table 2.2 |
| | Litter picking | |
| | Sign Cleaning | |
| | Traffic Calming Maintenance Works | |
| | Vegetation removal/weed control | |
| | Delineation schemes i.e. Line Marking/Painting and line removal | |
| | Stud inserts/removal/cats eye replacement | |
| | Seasonal Maintenance Works e.g. Winter Maintenance (de-icing/gritting roads) | |
| | Road sweeping | |
| | Gully cleaning | |
| | Minor Sign Installation Works | |
| | ITS Maintenance | |
| | Non-emergency Maintenance and Repair Operations including e.g. maintenance of utilities and street furniture | |
| | Emergency Maintenance and Repair Operations e.g. due to storm damage such as <ul style="list-style-type: none"> - Drain/ditch clearing works to relieve flooding - Statutory Undertaker repairs e.g. repairing power lines, utility faults | Random |

2.6 Safety and Health

The inspector should exercise caution when working in live traffic. The Inspector must be familiar with, and comply with, current legislation and best practice in relation to occupational health and safety pertaining to inspection or other activities on a live carriageway.

Websites and other sources providing guidance on safety of works and other activities on live carriageways, should be checked regularly for updates. These include the HSA website www.hsa.ie.

2.7 Inspection Reporting

Upon completion of inspections, a record of the inspection should be added to the relevant Temporary Safety Measures record on the TII Temporary Safety Measures web based database referenced in Section 2.4.

Where issues are identified during the inspection that may affect the safety of road users or road workers, the Temporary Safety Measures Inspector should notify the relevant person as soon as possible.

3. References

3.1 TII Publications (Technical)

CC-STY-04005 Inspection Qualifications for Temporary Safety Measures Inspections.

3.2 Other References

Chapter 8 of the Traffic Signs Manual published by the Department of Transport, Tourism and Sport.

Guidance for the Control and Management of Traffic at Road Works issued jointly by local authorities, the National Roads Authority, the Department of Transport, Tourism and Sport and by the Local Government Management Services Board.

Temporary Traffic Management Guidance Handbook for Traffic Signs Related Works and Road Marking Related Works Dashboard Manuals, Transport Infrastructure Ireland.

Appendix A: Worked Examples

Appendix A

Table A.1 Worked Examples for determining the most applicable minimum frequency of inspection required for sample types of Road Works

This table is provided for information only and should be read in conjunction with Section 2.5.

| Relevant Body | Contractor | Type of Road Works | Duration of the Temporary Safety Measures | Duration of the Contract | Applicable Table | Frequency of Inspection |
|-------------------------------|---|---|---|--------------------------|------------------|---|
| <i>TII or Road Operator</i> | MMaRC Contractor or PPP Company | All short duration maintenance works across the region such as grass cutting and litter picking | Up to 12 hours | Exceeding 1 year | N/A | Twelve inspections per annum at different locations |
| <i>Local Authority</i> | Maintenance Contractor or Local Authority Staff | All short duration maintenance works across the region such as grass cutting and litter picking | Up to 12 hours | Exceeding 1 year | N/A | Twelve inspections per annum at different locations |
| <i>TII or Road Operator</i> | MMaRC Contractor or PPP Company | Pavement resurfacing works | Greater than 12 hours, less than 1 month | N/A | 2/1 | 10% of sites, single inspection |
| <i>TII</i> | Signs & Lines Contractor | Sign maintenance for a region | Up to 12 hours | 2 years ¹ | 2/2 | Six inspections per annum at different locations |
| <i>TII</i> | Signs & Lines Contractor | Full route Delineation scheme | Up to 12 hours | 5 months ² | 2/2 | Four inspections |
| <i>TII or Local Authority</i> | Contractor | Eirspan bridge parapet replacement works | 1 month to 6 months | N/A | 2/1 | 50% of sites, single inspection. |
| <i>Statutory Undertaker</i> | Procured Contractor | Laying of water mains | 6 months to 1 year | N/A | 2/1 | 100% of sites, two inspections |
| <i>Local Authority</i> | Local Authority Staff | Reactive work to clear drains causing flooding following storm | Up to 12 hours | N/A | N/A | Random |

¹ Contract / Call-off contract for that region.

² Contract duration for delineation schemes may be affected by poor weather, this extended non-working Contract time should be considered when assessing the appropriate number of inspections to be undertaken.



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