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Transport Infrastructure Ireland

TII Publications



Road Safety Inspection

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Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

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Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference. For migration of documents from the NRA and RPA to the new system, each current document was assigned with new outer front and rear covers. Apart from the covers, and inside cover pages, the documents contain the same information as previously within the NRA or RPA systems, including historical references such as those contained within NRA DMRB and NRA MCDRW.

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NRA DMRB and MCDRW References

For all documents that existed within the NRA DMRB or the NRA MCDRW prior to the launch of TII Publications, the NRA document reference used previously is listed above under 'historical reference'. The TII Publication Number also shown above now supersedes this historical reference. All historical references within this document are deemed to be replaced by the TII Publication Number. For the equivalent TII Publication Number for all other historical references contained within this document, please refer to the TII Publications website.

Road Safety Inspection

December 2014

Summary:

This Standard covers the requirements for Road Safety Inspection on National Roads. It describes the roles and responsibilities of those engaged in Road Safety Inspection, and outlines the procedures to be followed when carrying out an inspection. It is to be read in conjunction with the HA 17 Road Safety Inspection Guidelines published by the National Roads Authority.

**VOLUME 5 ASSESSMENT AND
PREPARATION OF ROAD
SCHEMES**

**SECTION 2 PREPARATION AND
IMPLEMENTATION**

PART 2

NRA HD 17/14

ROAD SAFETY INSPECTION

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1. INTRODUCTION

General

- 1.1 The objective of this Standard is to ensure that Road Safety Inspections in respect of roads in operation are undertaken with sufficient frequency to safeguard adequate safety levels for the road infrastructure in question.

Revisions since HD 17/12

- 1.2 This Standard supersedes NRA HD 17/12 Road Safety Inspection. This Standard has been updated and minor revisions have been made throughout. The principal changes are as follows:
- a) The NRA Standards website address has been revised (paragraph 1.7);
 - b) The list describing items that should be provided to the inspection team prior to the site visit has been revised;
 - c) The requirement to consult with the Local Authority has been removed as it will be included in the Road Safety Inspection Guidelines;
 - d) The requirement for data collection during site visits has been revised.

Scope

- 1.3 This Standard sets out the procedures required to implement Road Safety Inspections on all National roads.
- 1.4 The Standard is commended to other Roads Authorities for use in inspections on Regional and Local Roads.

Definitions

- 1.5 *Road Safety Inspection:*

An ordinary periodical verification of the characteristics and defects of an operational road that require maintenance work for reasons of road safety.

- 1.6 *Authority:*

For National Roads the Authority is the National Roads Authority (NRA).

- 1.7 *Inspection Team:*

A competent Inspection Team appointed by the Authority consists of a minimum of two *Inspection Team Members*, one of whom is also approved as *Inspection Team Leader*. The current NRA training and experience requirements for Inspection Teams are subject to change and are available to download from the NRA standards website:

http://nrastandards.nra.ie/images/stories/Standards/Other_Standards_Docs/nrahd17_qualqs.pdf.

- 1.8 *Inspection Team Leader:*

An *Inspection Team Member* meeting the requirements of the Authority for *Inspection Team Leader* and appointed by the Authority to lead the *Inspection Team* for the particular *Road Safety Inspection*.

1.9 *Inspection Team Member:*

A person meeting the requirements of the Authority for participation in *Road Safety Inspection* and appointed by the Authority for the particular *Road Safety Inspection*.

1.10 *Inspection Brief:*

Prepared by the Authority for the Inspection Team to give direction on the extents of the Road Safety Inspection and to include all relevant data on that route section.

1.11 *NRA Road Safety Engineering Team:*

A team within the Authority capable of assessing the problems identified in a *Road Safety Inspection* and capable of making recommendations to the Authority in respect of remedial measures necessary to address the issues raised.

1.12 *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.

2. ROAD SAFETY INSPECTION

Roads to be Inspected

2.1 Road Safety Inspections shall apply to all National Roads except as noted in Paragraph 2.2.

Exemption

2.2 This Standard does not apply to:

- a) road tunnels covered by Directive 2004/54/EC of the European Parliament, however the approaches to tunnel portals shall be inspected;
- b) road works which are inspected under NRA HD 16 Temporary Safety Measures Inspection.

Scope of the Road Safety Inspection

- 2.3 The primary purpose of a Road Safety Inspection is to identify issues relating to road safety; it is not a check of compliance with design standards. The Road Safety Inspection shall only consider those matters that have an adverse bearing on road safety under all operating conditions.
- 2.4 The Authority shall ensure that Road Safety Inspections are undertaken on National Roads and shall give direction to the Inspection Team on the inspection requirements within the Inspection Brief.
- 2.5 The complete road and all its elements and junctions are to be inspected between the start and end points provided in the Inspection Brief. Intersecting roads shall be inspected to the position of the advance direction sign (ADS), or, in its absence, to 200m from the principal route, unless otherwise directed.

Safety Health and Welfare at Work Act

2.6 It is important to ensure that the Inspection Team complies with current legislation and best practice in relation to safety and health while undertaking Road Safety Inspections.

Occurrence of Safety Inspection

- 2.7 The Authority is responsible for initiating the Road Safety Inspection and for ensuring that a Road Safety Inspection is repeated at the appropriate time interval.
- 2.8 Road Safety Inspections shall be carried out on National roads at regular intervals of 5 years for Motorways, Type 1 & 2 Dual Carriageways, and 3 years for all other roads.
- 2.9 The Authority may carry out, or arrange for, additional inspections at its discretion. Changed operating conditions on a road, such as significantly increased traffic flows, are circumstances under which the Authority might consider that an additional inspection would be warranted.
- 2.10 The Road Safety Inspection shall identify the road safety issues which require remedial measures.

3. ROAD SAFETY INSPECTION PROCESS

Inspection Management

- 3.1 Regular Road Safety Inspections are an essential tool to identify the road safety issues in order to remove possible dangers and prevent collisions for all road users, including vulnerable road users. Road Safety Inspections will be carried out by an Inspection Team.
- 3.2 The Authority shall take the lead role in administering Road Safety Inspection on national roads.
- 3.3 The Authority shall initiate the inspection process, and shall provide an Inspection Brief.
- 3.4 The Inspection Team Leader is responsible for advising the local authorities, and, if appropriate, the emergency services, that a road safety inspection is being carried out.

Inspection Team

- 3.5 The Authority shall appoint an Inspection Team, consisting of a Team Leader and at least one other Team Member.
- 3.6 The current NRA training and experience requirements for Road Safety Inspection Teams are subject to change and are available to download from the NRA standards website:

http://nrastandards.nra.ie/images/stories/Standards/Other_Standards_Docs/nrahd17_qualqs.pdf

Inspection Brief

- 3.7 The Authority shall prepare an Inspection Brief.

Desk Study

- 3.8 The list below describes the items that should be provided, where available, to the Road Safety Inspection Team for review prior to undertaking the site visit:
 - a) Inspection Brief;
 - b) Network data
 - c) Collision data and trends;
 - d) Previous Road Safety Inspections including any remedial measures implemented in response to these inspections.
- 3.9 The Inspection Team should assemble and study the available route data prior to undertaking the site visit. This will ensure that they have sufficient knowledge of the route in order to make informed judgements during the visit.
- 3.10 This information will facilitate initial identification of possible road safety issues which are then subject to verification during the site visit.

Site Visits

- 3.11 A site visit, in both directions of travel, shall be carried out by all members of the assessment team together, during both the hours of daylight and darkness.

Road User Role Play

3.12 The Inspection Team shall assess the safety of the route from the perspective of all road users.

Methodology for Safety Inspection

3.13 The section below describes a working methodology for carrying out Road Safety Inspections.

- a) The Inspection Team reviews the route data, in particular the collision factors, provided by the Authority to get an overall appreciation of the route and to get an indication of potential safety issues and potential locations of concern in advance of the site visit;
- b) The Inspection Team visits the site during both the hours of daylight and darkness. The Inspection Team shall video the route and take photographs of the issues. All photographs and video recordings shall be geotagged to enable accurate future reference and all captured image data shall be provided to the client;
- c) Each road section should be driven more than once, and assessed from the point of view of all road users;
- d) One team member takes notes and images of all the possible road safety issues;
- e) The team members discuss their findings;
- f) A team meeting should be held as soon as reasonably practicable or ideally on site if considered safe to do so to ensure that the note-taker has covered all safety points;

3.14 Where there are road works on the route, the inspection should consider the road as it normally operates without the road works. Inspection of road works is not covered by this standard but is covered by NRA HD 16 Temporary Safety Measures Inspection.

Inspection Report

3.15 The Inspection Team shall prepare a written report, which shall be forwarded directly to the Authority.

3.16 The report must clearly identify the route and the Inspection Team membership.

3.17 The body of the report shall be kept brief and shall contain descriptions of the specific road safety issues identified by the Inspection Team. A risk rating comprising of an assessment of the probability of collision occurrence and a prediction of the likely severity of the collision shall also be provided.

3.18 The following items shall be included in the inspection report:

- a) Brief description of the route;
- b) The date of the site visit and the weather at the time;
- c) A list of the Inspection Team members and any other personnel present as observers;
- d) Identification of road safety issues and associated risks;
- e) Documented locations of the road safety issues, with thumbnail photographs appended clearly indicating the issue;
- f) A statement signed by the Team Members certifying that they have inspected the route;
- g) A list of information used in the inspection.

3.19 The main element of the report is the identification of the road safety issues and associated risks. The following points should be borne in mind when writing this section:

- a) Issues raised in the inspection report shall relate only to road safety issues within the scope of the Inspection, as outlined in the Brief. Non-safety items should not be included.
- b) The body of the report should be kept brief but must contain sufficient detail to fully describe the exact locations and the road safety issues identified by the Inspection Team.
- c) It should contain supporting information in respect of the findings and should include an informal risk assessment of each issue, comprising of an assessment of the probability of collision occurrence and a prediction of the likely severity of the collision.
- d) Safety issues that have remained unaddressed from previous inspections should be re-recorded at subsequent inspection stages, if the current Team considers them to be items relevant to an inspection.
- e) A sample report format, which satisfies the requirements of this standard, is contained in the guidance document NRA HA 17 Road Safety Inspection Guidelines, which is available to download from the NRA standards website:

<http://nrastandards.nra.ie/road-design-construction-standards/dmrb/volume5/nra-ha-17-road-safety-impact-assessment>

3.20 The inspection report shall be provided by the Team Leader directly to the Authority and should be sent by the date, if any, specified in the Inspection Brief.

Subsequent Actions to the Inspection Report

3.21 The recipient of the inspection report will be the Authority who shall forward it to the NRA Road Safety Engineering Team.

3.22 The NRA Road Safety Engineering Team may, if it considers that clarification or discussion of the report would be of benefit, arrange a meeting involving the following:

- a) NRA Engineering staff
- b) Road Authorities or Road Operator relevant to the route inspected
- c) The Inspection Team Leader and other Team Members considered necessary by the Authority.

3.23 The inspection report shall be issued to the Authority by the Team Leader in final format following that meeting, or in the absence of a meeting, by a date specified by the Authority.

4. REFERENCES

- 4.1 National Roads Authority Design Manual for Roads and Bridges, Volume 5: [HD 19 Road Safety Audit](#).
- 4.2 Institution of Highways and Transportation, [Road Safety Audit Guidelines](#).
- 4.3 National Roads Authority, [2010 Project Management Guidelines](#)
- 4.4 National Roads Authority Design Manual for Roads and Bridges, Volume 5: [HA 19 Road Safety Audit Guidelines](#).

5. ENQUIRIES

- 5.1 All technical enquiries or comments on this document or any of the documents listed as forming part of the NRA DMRB should be sent by e-mail to infoDMRB@nra.ie, addressed to the following:

“Head of Network Management, Engineering Standards & Research
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