

Road Safety Inspection

June 2012

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 17/12

ROAD SAFETY INSPECTION

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1 INTRODUCTION

General

1.1 The objective of this Standard is to ensure that the 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.

Scope

1.2 This Standard sets out the procedures required to implement Road Safety Inspections on all National roads.

1.3 The Standard is commended to other Roads Authorities for use in inspections on Regional and Local Roads.

Definitions

1.4 *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.

1.5 *Authority:*

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

1.6 *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*. Current NRA training and experience requirements for Inspection Teams are available on the NRA website. www.nra.ie/Publications/RoadSafety

1.7 *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*.

1.8 *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*.

1.9 *Inspection Brief:*

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

1.10 *NRA Road Safety Engineering Team:*

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

1.11 *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 Except as noted in Paragraph 2.2, Road Safety Inspections shall apply to all National Roads.

Exemption

- 2.2 This Standard does not apply to:
- road tunnels covered by Directive 2004/54/EC of the European Parliament, but the approaches to tunnel portals shall be inspected;
 - road works, which are inspected under *NRA HD 16/12 Temporary Safety Measures Inspection* (see Para. 3.17).

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 may, at its discretion, confine the scope of an Inspection to particular, pre-defined elements of the road layout; for example, it may confine the Inspection to road delineation only. Any direction to confine an Inspection will normally be provided in the Inspection Brief. This confined Inspection will not obviate the need for the periodic Road Safety Inspections at the required interval.

2.5 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.

2.6 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

2.7 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

2.8 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.

2.9 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.

2.10 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.

2.11 The Road Safety Inspection shall identify the road safety issues which require engineering works to remediate.

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 is downloadable on NRA website.

www.nra.ie/Publications/RoadSafety

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:

- Inspection Brief;
- Route mapping at appropriate scale;
- Video information collected as part of annual surveys;
- Collision data;

- Road Collision Factors compiled by NRA from statistics from national collision data;
- Traffic flows;
- Road Speeds;
- Road Surface Analysis;
- 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 to ensure that they have sufficient knowledge of the route to make informed judgements during the visit.

3.10 Initial identification of possible road safety issues may be made from this information 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.

- The Inspection Team looks through 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;
- The Inspection Team visits the site during daylight and at night. Photographs or video images should be taken, which can be used for later reference;
- Each road section should be driven more than once, and assessed from the point of view of all road users;

- One team member takes notes and images of all the possible road safety issues;
- The team members discuss their findings;
- 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;
- The Inspection Team then consults with the relevant local authorities to obtain local information on any road safety issues which may have been brought to the local authority's attention;
- Having consulted with the relevant local authorities and examined the issues raised, one team member produces a draft Road Safety Inspection Report; the second team member checks the report and edits if necessary.

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 16/12 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 together with their associated risk rating comprising of an assessment of the probability of collision occurrence and a prediction of the likely severity of the collision.

3.18 The following items should be included in the Inspection Report:

- Brief description of the route;
- The date of the site visit and the weather at the time;
- A list of the Inspection Team members and any other personnel present as observers;

- Identification of road safety issues and associated risks;
- Plans showing the locations of the road safety issues, with thumbnail photographs appended;
- A statement signed by the Team Members certifying that they have inspected the route;
- 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:

- 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.
- The body of the report should be kept brief but must contain sufficient detail to fully describe the road safety issues identified by the Inspection Team.
- 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.
- 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.
- A sample report format, which satisfies the requirements of this standard, is contained in the guidance document *NRA HA 17 Road Safety Inspection Guidelines*, available from NRA website.

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:

- NRA Engineering staff
- Road Authorities, Road Operator relevant to the meeting
- 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

NRA Design Manual for Roads and Bridges, Volume 5: *HD 19, Road Safety Audits*.

Institution of Highways and Transportation. *Road Safety Audit Guidelines*. IHT, London, 2008

National Roads Authority. *2010 Project Management Guidelines*

5 ENQUIRIES

All technical enquiries or comments on this Standard should be sent in writing to:

Head of Network Management, Engineering Standards & Research
National Roads Authority
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