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Road Safety Impact Assessment

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Planning & Evaluation

Standards

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TII Publications



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Contents

1.	Introduction	1
2.	Road Safety Impact Assessment	3
3.	Road Safety Impact Assessment Process	4
4.	References.....	7

**Updates to TII Publications resulting in changes to
Road Safety Impact Assessment PE-PMG-02001**

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Amendment Details:

This Standard supersedes the October 2016 version of PE-PMG-02001. The principle changes are outlined below:

- a) The Introduction has been standardised in line with the other road safety Standards.
- b) The Scope and Definitions have been updated.
- c) The description of the schemes to be assessed has been revised.
- d) Wording has been revised throughout in line with the Project Management Guidelines.
- e) Section 3.6 Subsequent Actions to the Report has been updated for clarification.

Contents Table

1.	Introduction	1
1.1	General.....	1
1.2	Scope	1
1.3	Definitions.....	1
2.	Road Safety Impact Assessment	3
2.1	Schemes to be Assessed	3
2.2	Scope of the Impact Assessment	3
2.3	Safety, Health and Welfare at Work Act	3
2.4	Stage of Impact Assessment	3
3.	Road Safety Impact Assessment Process	4
3.1	Impact Assessment Team	4
3.2	Impact Assessment Elements	4
3.3	Site Visits.....	4
3.4	Road User Role Play	4
3.5	Impact Assessment Report.....	4
3.6	Subsequent Actions to the Report	6
4.	References.....	7
4.1	TII Publications (Standards) References	7
4.2	TII Publications (Technical) References	7
4.3	Other Miscellaneous References.....	7

1. Introduction

1.1 General

This Standard outlines the requirements for Road Safety Impact Assessment 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.

The objective of this Standard is to ensure that the implications on road safety of different planning alternatives are fully assessed as part of both feasibility study and route selection process. This assessment shall indicate the road safety considerations which contribute to the choice of the proposed solution.

1.2 Scope

This Standard sets out the procedures required to implement Road Safety Impact Assessments on schemes affecting national roads. It defines the relevant schemes and stages in the design at which assessment shall be undertaken.

The Standard should be read in conjunction with the EU RISM Directive 2008/96/EC, SI 472 of 2011 and PE-PMG-02005 Road Safety Impact Assessment Guidelines.

1.3 Definitions

1.3.1 Road Safety Impact Assessment:

The strategic comparative analysis of the impact on the safety performance of the road network of different planning alternatives for a new road or a substantial modification to the existing network.

1.3.2 Road Safety Audit:

The evaluation of a road scheme during design, construction and early operation to identify potential safety hazards which may affect any type of road user and to suggest measures to eliminate or mitigate those problems.

1.3.3 Employer:

The organisation managing the various phases of scheme preparation and supervision of construction or as defined in the Contract.

1.3.4 Design Team

The Design Team undertaking the various phases of scheme preparation.

1.3.5 Design Project Manager

The leader of the Design Team undertaking the various phases of scheme preparation..

1.3.6 Impact Assessment Team:

An Assessment Team consisting of a minimum of two persons appointed by the Design Project Manager and approved by the Director or equivalent in the Overseeing Organisation.

1.3.7 Overseeing Organisation:

Transport Infrastructure Ireland (TII) shall be the overseeing organisation for all schemes on or affecting the National road network that require a road safety impact assessment.

1.3.8 Director:

The Head of the TII Road and Tunnel Safety section or equivalent in the Overseeing Organisation..

1.3.9 Road Safety Impact Assessment Report:

The report submitted by the Local Authority contact to the Director.

1.3.10 Road Scheme:

A scheme that results in new road construction or permanent change to the national road network or that affects the national road network.

1.3.11 Local Authority Contact:

The Client or the Employer's Representative or the Planning Authority representative.

2. Road Safety Impact Assessment

2.1 Schemes to be Assessed

Road Safety Impact Assessment shall apply to Major Schemes on national roads as defined in PE-PMG-02041 Project Management Guidelines, which result in a substantial modification to the existing national road network. TII may deem it appropriate to have a Road Safety Impact Assessment carried out on schemes with a value less than the threshold for a Major Scheme if it is deemed sufficiently complex.

2.2 Scope of the Impact Assessment

The primary purpose of a Road Safety Impact Assessment is to demonstrate, on a strategic level, the implications on road safety of different planning alternatives of a road scheme.

The Road Safety Impact Assessment shall indicate the road safety considerations which contribute to the choice of the proposed solution. It shall further provide all relevant information necessary for the selection of the solution, including a comparative analysis of the road safety implications of each alternative considered and an evaluation of the road safety benefits and dis-benefits arising from each alternative.

2.3 Safety, Health and Welfare at Work Act

The Assessment Team shall comply with current legalisation and best practice in relation to safety and health while undertaking Road Safety Impact Assessments.

2.4 Stage of Impact Assessment

Road Safety Impact Assessment shall be carried out at the initial planning stage of a project and shall be reviewed as necessary through the design phases until scheme approval.

The alternatives presented and considered at this stage can vary widely and should include the Do-Nothing and Do-Minimum proposals. For instance, a large scheme for a proposed town bypass presented at Feasibility Stage could include not only a wide range of potential alternative routes, but also the option of continuing with the existing situation, and a minimal option of minor improvements along the existing route.

Road Safety Impact Assessment does not replace or preclude Road Safety Audit, which is done by a team independent of the design process. The requirements for Road Safety Audit are set out in GE-STY-01024.

It is recommended that a Road Safety Impact Assessment should be undertaken during the preparation of County Development Plans and Local Area Plans, where zoning objectives may require a new junction or access on to a national road or modifications to an existing junction on to a national road. For policies on accesses onto national roads please refer to Spatial Planning and National Road Guidelines for Planning Authorities (DoELG, 2012).

3. Road Safety Impact Assessment Process

The Road Safety Impact Assessment is an integral part of the design process and is to be produced by the Design Team.

3.1 Impact Assessment Team

The Project Manager of the Design Team, in consultation with the Overseeing Organisation, shall appoint a competent Road Safety Impact Assessment Team from within the Design Team. The Local Authority Contact shall submit the names and CVs of the assessment team members to the Director for approval. Details of the proposed scheme, including scheme extents, and a site location map shall also be submitted.

Current TII training and experience requirements for Road Safety Impact Assessment Teams are subject to change and are set out in PE-STY-02003.

3.2 Impact Assessment Elements

Annex I, of the EU RISM Directive 2008/96/EC contains a list of the elements that should be considered by the road safety impact assessment team. All these items are included in section 3.5, which describes the contents of a Road Safety Impact Assessment Report.

3.3 Site Visits

A site visit shall be carried out by all members of the assessment team at the same time.

3.4 Road User Role Play

Road safety issues affecting all road users must be considered. In general pedestrians and other vulnerable road users are affected more acutely than other road traffic by changes in road alignment and/or changes to available routes. The Road Safety Impact Assessment shall include an assessment of the impact of the scheme on all road users including vulnerable road users.

3.5 Impact Assessment Report

The Road Safety Impact Assessment Team shall prepare a written report on the Road Safety Impact Assessment undertaken during the planning stages of the project. The report must clearly identify the scheme and the Road Safety Impact Assessment Team membership.

The following items should be included in the Road Safety Impact Assessment Report:

- Problem definition, defining the objectives of the scheme;
- Road Safety Objectives of the proposed scheme, highlighting any specific scheme objectives to remove a particular road safety problem on the existing road network;
- The date of the site visit and the weather at the time;
- A list of the Road Safety Impact Assessment Team members;

- Extents of the entire area of the road network where route choice and traffic patterns would be affected by the proposed scheme;
- Existing road safety problems on the current road network within the defined extents;
- Analysis of the collision history for at least five years;
- Road safety consequences of the Do-Nothing and Do-Minimum scenarios;
- Description of each alternative proposal;
- Assessment of impacts on road safety of the proposed alternatives;
- Comparison of alternatives, including analysis of the monetary benefits from a safety perspective;
- The TII strategy for provision of safe rest stops for drivers in the wider region surrounding the proposed scheme location should be consulted;
- Ranking of options.

The main element of the report is the comparative road safety impact assessment of the effects of each alternative proposal. The following points should be borne in mind when writing this section:

- Where proposed alternatives differ in scale and cover differing lengths or areas of the existing network, a common assessment area must be defined for all options being compared and all impacts within this area considered;
- An assessment of the effects of each alternative must be made in terms of predicted collisions. Quantitative indicators can be used such as collision rates, collisions per junction type etc.

All effects on traffic flow and traffic patterns must be considered. Any projected change in modal split as a consequence of the proposals is important as this may not only affect the mix of vehicle category within the traffic flow, but may also impact on patterns of pedestrian and cycle travel and locations where conflicts with other vehicles occur.

The likely range of seasonal and climatic conditions should be considered.

An assessment of the road safety benefits and dis-benefits of each option shall be produced to compare to the Do-Minimum situation.

The options, including the Do-Minimum option, should be ranked in terms of road safety considerations, giving an order of preference and an indication of the magnitude of difference between options. If one option, or a group of options, show considerably more or less benefit than the others then this should be highlighted. Conversely, if there is little difference in road safety terms between two or more of the proposals then these should be given the same ranking.

Appendices shall include all data necessary to understand the Road Safety Impact Assessment as a separate document without the need to reference other reports on the scheme. This is likely to necessitate inclusion of drawings, photographs and a summary of collision records.

3.6 Subsequent Actions to the Report

The Local Authority Contact shall submit the draft Road Safety Impact Assessment Report to the Director for review and comment. The Director shall liaise with the Local Authority Contact regarding the draft report. The Local Authority Contact shall convey any comments to the Road Safety Impact Assessment Team.

If changes are required, the Local Authority Contact shall submit a revised report to the Director. Once the Director is satisfied that all comments have been addressed, the report can be finalised.

The final Road Safety Impact Assessment Report shall be used by the Design Team to inform the option selection phase of scheme design.

4. References

4.1 TII Publications (Standards) References

GE-STY-01027 Road Safety Audit Guidelines

GE-STY-01024 Road Safety Audit

PE-PMG-02005 Road Safety Impact Assessment Guidelines

4.2 TII Publications (Technical) References

PE-STY-02003 NRA HD 18 Road Safety Impact Assessment - Impact Assessment Team Qualifications

PE-PMG-02041 Project Management Guidelines

PE-PMG-02004 NRA 2010 Project Management Guidelines

4.3 Other Miscellaneous References

European Parliament and the Council of the European Union, 2008. Directive 2008/96/EC of the European Parliament and of the Council of 19th November 2008 on Road Infrastructure Safety Management.

European Transport Safety Council, 1997. Road Safety Audit and Safety Impact Assessment

Department of the Environment, Community and Local Government, 2012. Spatial Planning and National Roads. Guidelines for Planning Authorities.

Statutory Instrument No. 472 of 2011. European Communities (Road Infrastructure Safety Management) Regulations 2011.

The Institution of Highways and Transportation, 2008. Road Safety Audit.



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